Our Vision for Children’s Vision
A NATIONAL CALL TO ACTION FOR THE ADVANCEMENT OF CHILDREN’S VISION AND EYE HEALTH

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healthy eyes for healthy futures

INCLUDES AN INTRODUCTION TO THE NATIONAL CENTER FOR CHILDREN’S VISION AND EYE HEALTH
# Table of Contents

1. **Foreword**  
   03

2. **Introduction**  
   04

3. **Introducing the National Center for Children’s Vision and Eye Health**  
   05

4. **Establishing a Children’s Vision and Eye Health Platform**  
   06

5. **Professional Eye Health Care**  
   08

6. **Vision Screening: A Common Approach and Understanding**  
   12

7. **School Readiness and Vision**  
   16

8. **Children’s Eye Safety**  
   20

9. **Public Awareness and Understanding of Children’s Vision and Eye Health**  
   24

10. **Pediatric Vision and Eye Health Research**  
    26

11. **Children’s Vision and Eye Health Logic Model**  
    28

12. **Call to Action**  
    30

13. **Appendices**  
    
    14. **Common Children’s Vision and Eye Problems**  
        32

    15. **Pediatric Vision Screening Program Protocol**  
        34

    16. **Eye Safety Tips**  
        35
Foreword

“Can it be possible that in a civilized country like our own, one in which the most scientific methods are supposed to be in use, babies are allowed to lose their eyes when they might have been saved?” These humble yet probing words from 1908 formed Louisa Lee Schuyler’s vision for children’s vision—that no child should needlessly be robbed of a lifetime of sight. Thus began a century-long movement that continues today under the auspices of Prevent Blindness America.

The early years of the organization, under Ms. Schuyler’s guidance, led to legislation that all but eliminated one form of infant blindness—ophthalmia neonatorum—by mandating the use of silver nitrate drops in the eyes of all newborns. Over the many intervening years, programmatic efforts, scientific advancements and changes in public policy have led to many more great strides in children’s vision and eye health. Yet today, in 2010, there remain far too many children who are blind, severely visually impaired, or simply have undetected refractive errors that hinder their ability to learn—and thus to grow into successful, achieving individuals.

Our Vision for Children’s Vision shares a six-plank platform for children’s vision and eye health. As we begin our second century of preventing blindness and saving sight, we honor the importance of professional eye health care and emphasize the critical public health role that vision screening plays in that continuum of care. We recognize the importance of ensuring all children are prepared to enter school unhampered by undetected vision problems. We address the importance of eye safety at home, school and play; and stress the significance of advances in pediatric vision research. Finally, we acknowledge that our vision cannot be fully achieved without public awareness and understanding of children’s vision and eye health.

This second edition of Our Vision for Children’s Vision is shared under our new Star Pupils initiative, a national campaign to educate the public about the importance of children’s vision and eye health. Also with this edition, we are pleased to introduce the National Center for Children’s Vision and Eye Health, a collaborative venture supported by the Maternal and Child Health Bureau of the Health Resources and Services Administration at the U.S. Department of Health and Human Services. The Center is designed to serve as a major resource for the establishment of a public health infrastructure to advance and promote children’s vision and eye care, as well as provide leadership development, health promotion, education, and training.

This is not work we can undertake on our own. We recognize the invaluable contributions of all the individuals and organizations who similarly dedicate their time and resources toward advancing children’s vision and eye health. We share our vision as a national call to action to our partners and anyone committed to children’s health to join our efforts, continue your own, and come together as a community of care for our nation’s children.

Our vision for children’s vision may be slightly more multi-faceted, yet at its core is the same urgency that drove Ms. Schuyler a century ago—that the gift of sight be afforded to all children. Their beautiful young eyes—be they brown, blue, green, grey, amber or hazel—are indeed their windows to the world. Let us come together to ensure them a magnificent view…to ensure that all of America’s children are Star Pupils!

Hugh R. Parry  James E. Anderson
President & CEO  Board Chairperson
Prevent Blindness America  Prevent Blindness America
Introduction

Vision disorders, including amblyopia, strabismus, and significant refractive errors, are the most prevalent disabling childhood conditions in the United States.\(^1\) If not detected and treated early, these conditions could lead to permanent vision loss. They also clearly affect all aspects of life, negatively impacting a child’s ability to learn, athletic performance and self-esteem.

This is a daunting problem indeed. Yet, there is much that can be done! There are a large number of organizations and individuals with an interest in ensuring healthy vision for our nation’s children. These cross all spectrums of our society; including education, government, public health, communities of faith, families, healthcare providers and systems, and businesses, to name a few. To multiply our collective impact, it is essential that we come together around a core set of objectives, using these as the guiding principles for advancing children’s vision and eye health.

As the nation’s leading voluntary health organization dedicated to the prevention of blindness and the preservation of sight, Prevent Blindness America, within our Star Pupils initiative, is well situated to guide the charge toward improved children’s vision and eye health. By laying out a platform for children’s vision, we are taking the first necessary step in this charge. But it is through the bringing together of the missions, resources, talents and knowledge bases of all stakeholders that we can maximize our collective impact and forge a common approach to children’s vision and eye health.

This platform embraces the public health approaches outlined by the U.S. Department of Health and Human Services’ *Healthy People* Vision Objectives, which are designed to identify the most significant preventable threats to health and to establish national goals to reduce them. Developed through a broad consultation process with key stakeholders, including various members of the vision and eye health community, these are built on the best scientific knowledge available, and are designed to measure programs over time. Additionally, the recently established National Center for Children’s Vision and Eye Health will serve as an avenue for advancing this platform, using best practices from across the country and the knowledge base of leading experts in a wide range of public health fields.

Over the course of the following pages, we share our vision for children’s vision. Certainly our objectives are not all-encompassing, nor are they easily obtainable, but we do believe our platform establishes a strong, scientifically sound, public health framework around which we can all advance a national movement for children’s vision and eye health.

References
National Center for Children’s Vision and Eye Health

Prevent Blindness America recently established the National Center for Children’s Vision and Eye Health to support the development of a public health infrastructure to promote and ensure a comprehensive, multi-tiered continuum of vision and eye health care for young children. The Center is a collaborative effort with the Maternal and Child Health Bureau at the Health Resources and Services Administration of the U.S. Department of Health and Human Services, and is committed to conducting its work through strong partnerships, sound science, and targeted policy initiatives.

During its first few years, the Center will focus its efforts on achieving the following core elements:

• Providing national leadership in the development of best practices and guidelines for public health infrastructure, vision screening, and statewide strategies that ensure early detection, vision screening, and a continuum of vision and eye health care for young children.

• Determining mechanisms for advancing state-based performance improvement systems, screening guidelines, and a mechanism for uniform data collection and reporting.

• Working in collaboration with five states – Georgia, Illinois, Massachusetts, North Carolina and Ohio – to develop and implement statewide strategies for vision screening for young children, establish quality improvement strategies, and determine a mechanism for the improvement of data systems and reporting of children’s vision and eye health services within their states.

The National Center for Children’s Vision and Eye Health is designed to serve as a central resource for health promotion and leadership development. It will also serve as a resource for education and training in respect to children’s vision and eye health for public and private entities throughout the United States.

The Center has established a National Expert Panel comprised of national experts in ophthalmology, optometry, pediatrics, public health, academia, parents, and others who have a stake in the field of children’s vision and eye health. The Expert Panel will provide recommendations toward the establishment of national guidelines for quality improvement strategies, vision screening, performance measures, and data systems to advance a full continuum of children’s vision and eye health care. In addition, they will serve as advisors to the National Center for Children’s Vision and Eye Health as it pursues its core goal of developing and implementing a uniform strategy for universal screening of young children.
Establishing a Children’s Vision and Eye Health Platform

To positively impact children’s vision health and safety in our nation, Prevent Blindness America introduces our children’s vision and eye health platform and commits to the following national efforts as Our Vision for Children’s Vision:
This platform will guide our efforts related to children’s vision, and we invite other key stakeholder organizations and individuals to join us in moving this national effort forward.

1. **Professional Eye Health Care**
   We will support healthcare professionals and advance vision care in public health policies and primary healthcare delivery systems.

2. **Vision Screening: A Common Approach and Understanding**
   We will promote well-designed, properly-administered vision screenings with appropriate follow-up care as an integral part of a public health approach to children’s vision and eye health.

3. **School Readiness and Vision**
   We will implement a long-term comprehensive campaign to ensure school-entry vision screening requirements for all children that meet a checklist of minimum standards are in place, to include an exam component for failed screenings.

4. **Children’s Eye Safety**
   We will create changes in unsafe individual behaviors, thereby reducing the incidence of home, school, and recreational eye injuries in children.

5. **Public Awareness and Understanding of Children’s Vision and Eye Health**
   We will increase public awareness and understanding of the importance of children’s vision and eye health.

6. **Pediatric Vision and Eye Health Research**
   We will advocate for increased funding for pediatric vision research activities related to children’s vision and eye health.
Professional Eye Health Care

Our Vision: That all children receive comprehensive vision care within an established continuum of care; and that all pediatricians, family practice providers, and other healthcare professionals dealing with children, adequately address vision and eye health during their regular course of patient services.
What We Know

- While it is understood that early identification and treatment of health problems typically reduce complications and lead to improved healthy outcomes, according to a recent report from the Centers for Disease Control and Prevention (CDC), only one in three children in America has received eye care services before the age of six.¹

- Although policies and guidelines exist, fewer than one half of all children are screened in pediatric offices, and currently only 21 percent of preschool-age children are screened for vision problems.²,³

- A recent study involving children with special healthcare needs found that those who are patients of pediatricians had a lower risk of unmet need for vision care than those with other types of providers.⁴

- Based on data from an examination of medical records from nine states, 60 percent of children on Medicaid in those states did not receive vision screenings (a required component of the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) screenings, a child health benefit for children under the age of 21).⁵

- A leading preschool vision screening study recommends that methods be developed to improve communication between eye care specialists and primary healthcare professionals about an individual child’s eye problems.⁶

See appendix A for a glossary of common children’s eye problems.

Our Position

Prevent Blindness America supports a healthcare delivery system that includes a continuum of eye care for children, to include both vision screening and comprehensive eye examinations.⁷ All children, even those with no signs of trouble, should have their eyes checked at regular intervals. Based on the recommendations of key health organizations, we endorse a combination of screenings and exams, utilizing the following timetables, for children’s vision and eye health:

- Any child who experiences vision problems or shows symptoms of eye trouble at any time should receive a comprehensive eye examination by an ophthalmologist or an optometrist.

- Newborn infants should have their eyes checked while still in the hospital nursery. This examination in the nursery should be for general vision and eye health and include a red reflex test. This examination can help detect several congenital eye problems, some of which can be very serious and permanently threaten vision.

- During regular well-baby exams, from birth to two years of age, pediatricians should use history and a vision evaluation to see if vision problems exist. Beginning with well-child exams at age three and continuing through ten years of age, vision screenings should be performed assessing visual acuity and ocular alignment.

- If a child fails a vision screening or there is any concern of an eye or vision problem the child should be referred for a comprehensive professional eye examination.

This combination of primary care physician eye examinations and vision screenings with referral for a comprehensive professional eye examination is the recommendation of the American Academy of Family Physicians, the American Academy of Ophthalmology, the American Academy of Pediatrics, the American Association of Certified Orthoptists and the American Association for Pediatric Ophthalmology and Strabismus.⁸

The American Optometric Association supports primary care physician evaluations and regularly scheduled vision screenings, but also recommends that asymptomatic/risk free pediatric patients should have a comprehensive examination at age three followed by another examination before first grade and at least every two years thereafter.⁹

There are several key professions which play a vital role in the vision and eye healthcare of our nation’s children. Among these are primary care providers, eye care professionals, school nurses and low vision specialists.
Primary Care Providers
Primary care providers (specifically pediatricians and family care providers) have the most regular contact with preschool-age children. Well-child visits provide an excellent opportunity for the early detection of vision-related problems in children. It is during these well-child visits that children should receive an evaluation of their vision and eye health, including an overview of family history, objective vision screening and physical assessment of the eyes.

Prevent Blindness America supports the American Academy of Pediatrics’ policy promoting the “medical home”—a belief that the medical care of infants, children and adolescents ideally should be accessible, continuous, comprehensive, family centered, coordinated, compassionate and culturally effective; and that it should be delivered or directed by well-trained professionals who provide primary care and help to manage and facilitate essentially all aspects of pediatric care. Such a level of care should be available to all children, regardless of family income.10

Eye Care Professionals
A professional eye examination by an ophthalmologist or an optometrist is, without doubt, the “gold standard” of eye care and should be at the forefront of children’s vision and eye health. Eye examinations not only identify eye and vision-related disorders, but can also potentially serve as systemic indicators of overall health and wellness through linkages with various chronic disease states and health-related conditions.

Although screenings can help to determine which children might have an eye disorder, a comprehensive eye examination is necessary to make a formal diagnosis prior to initiating treatment.

To ensure appropriate vision care is available and accessible to the medically underserved, Prevent Blindness America supports the expansion of services within Federally Qualified Health Centers, and other community health centers, to include vision care; and the inclusion of doctors of optometry in the outreach efforts of the National Health Services Corps.

Prevent Blindness America also applauds efforts of the professional associations and private sector providers to engage their respective members in programs to educate the public and increase access to eye care. Efforts such as the American Academy of Ophthalmology’s Eyecare America®, the American Optometric Association’s InfantSEE® and VSP Vision Care’s Sight for Students educate and serve the public while simultaneously enhancing the connection between eye care professionals and their communities.

School Nurses
School nurses play a critical role in the continuum of vision and eye healthcare. For many students, a school-based vision screening may be the only opportunity they have to assess their vision. While many states have varying levels of screening requirements, Prevent Blindness America endorses the National Association of School Nurses’ policy of encouraging all nurses to conduct screenings, even when not required by the state.11

Beyond the screening itself, school nurses are appropriately situated to assist children and families in understanding vision conditions and in accessing care through referral to appropriate eye care professionals and vision-specific programs, agencies and services. They can also assist teachers and fellow students in understanding situations related to a child’s vision care, such as patching for amblyopia.

Vision Rehabilitation Specialists
The role of this classification of eye care professional cannot be minimized. While it should certainly be our goal to reduce the number of children with any vision loss, vision rehabilitation specialists train children with vision impairments to better use the vision they do have.

Communication among all the professionals involved in a child’s vision care is critical to closing the loop on the continuum of eye care, as well as to supporting the concept of a medical home. Sharing of information related to screening results, diagnoses, treatments, and outcomes (compliant with HIPAA standards) must be encouraged and facilitated.
Our Efforts
In the best interests of the nation’s children, Prevent Blindness America commits to supporting healthcare professionals and advancing vision care in public health policies and primary healthcare delivery systems by:

1. Increasing the implementation of vision screening in the pediatric office setting by fully developing a replicable vision screening and training program for pediatric primary healthcare providers, expanding on the Preschool Vision Screening for Healthcare Professionals manual developed in collaboration with the American Academy of Pediatrics.

2. Working with the American Academy of Pediatrics to ensure the inclusion of appropriate vision and eye health coverage in the Academy’s Bright Futures initiative.

3. Sustaining and/or increasing federal funding for the Vision Health Initiative at the Centers for Disease Control and Prevention.

4. Securing a federal appropriation to the Maternal and Child Health Bureau of the Health Resources and Services Administration to support the ongoing work of the National Center for Children’s Vision and Eye Health.

5. Working with the National Association of Community Health Centers, vision community partners, and the Health Resources and Services Administration to pursue strategies to advance a vision and eye health promotion model for community health centers.

6. Working with the Centers for Disease Control and Prevention and the National Association of Chronic Disease Directors to advance an eye health integration model for increasing efforts by health departments to integrate children’s vision and eye health initiatives across all relevant departmental programs.

7. Advocating for expansion of federal surveillance of children’s vision and eye health, such as the inclusion of National Center for Health Statistics questions into appropriate national and state surveys like the National Survey on Children’s Health.

8. Securing federal support for an Institute of Medicine report on public health and children’s vision to bring expanded federal attention to the public health impact of children’s vision and eye disorders.

9. Educating partner organizations and the public about the minimum vision services required by the State Children’s Health Insurance Program and the Early and Periodic Screening, Diagnostic and Treatment Services benefit.

10. Securing federal funding to states to support children’s vision and eye health care by expanding vision care in the State Children’s Health Insurance Program, working with vision community partners to pass the Vision Care for Kids Act, and promoting model regulations for children’s vision and eye care within state health insurance exchanges.

11. Promoting communication across professions, as it relates to children’s vision and eye health.

12. Supporting efforts to expand the eye health workforce through changes in the policies of the National Health Services Corps to allow for the participation of optometrists.

13. Facilitating a Federal intra-governmental task force to monitor and address children’s vision screening and care coordination.

References
Vision Screening: A Common Approach and Understanding

Our Vision: That the proper role of vision screening in the continuum of children’s vision and eye health is universally understood; and that vision screening guidelines, mechanisms for uniform data collection and reporting, and state-based performance measures are established and accepted as the gold standard for vision screening.
What We Know

• The Partnership for Prevention, in reviewing the U.S. Preventive Services Task Force’s listing of recommended clinical preventive services, found that pediatric vision screening is inexpensive, treatment is effective and it improves the quality of life. The U.S. Preventive Services Task Force recommends screening to detect amblyopia, strabismus, and defects in visual acuity in children younger than five years of age.¹

• A leading preschool vision screening study notes that vision screening, with appropriate follow-up care, is critical to the welfare of our children and can have an impact not only on vision and eye health but also on social development and productivity.²

• This same study notes that a national consensus about the adequacy of current methods for preschool vision screening has not been reached, and recommends certification and recertification programs for individuals who conduct vision screenings should be further developed to improve accurate and reliable implementation of screening and referral guidelines in both community and primary care settings.³

• From 2002–2010 Prevent Blindness America-certified vision screeners screened more than 18 million children, referring approximately 1.6 million for comprehensive eye care. Many of these children would have otherwise gone undetected.

• While Head Start currently requires children to be screened for vision problems, there is no consistent protocol for training, tracking, or even conducting the screening. Such a lack of uniform national standards could cause many Head Start enrollees to fall through the cracks.

• The nation’s premier healthcare agenda, the Healthy People initiative, established an objective of increasing the proportion of preschool children who receive vision screenings to 52% by 2010. Based on preliminary data, this objective has not yet been met.⁴

Our Position

Prevent Blindness America acknowledges that professional eye examinations are the “gold standard” of eye care and should always be encouraged. We also believe that vision screening is an appropriate and essential element of a strong public health approach to children’s vision care. The purpose of vision screening is to increase the number of children in need of care who ultimately receive comprehensive eye exams.

While we fully support the role of primary healthcare professionals and school nurses in conducting vision screenings, we also believe that community and school-based screenings conducted by trained vision screeners and utilizing a scientifically-validated and approved screening protocol enhance the public health model of vision care.

Prevent Blindness America and other volunteer-based organizations often perform vision screenings for children at schools, daycare centers, and other settings. Vision screenings and eye examinations are complementary approaches to assessing the eye problems of a child. A screening is used to identify a child at risk for vision problems and does not replace a comprehensive examination performed by an eye doctor.

The role of vision screenings in the continuum of vision and eye healthcare is fully supported by the American Academy of Family Physicians, the American Academy of Ophthalmology, the American Academy of Pediatrics, the American Association of Certified Orthoptists and the American Association for Pediatric Ophthalmology and Strabismus.⁵
Prevent Blindness America agrees that the key to successful vision screening programs is that they be well-designed and properly administered. Otherwise, they fail in their intended role to advance children’s vision and eye healthcare. Unfortunately, while a comprehensive eye examination is understood to include an evaluation of the refractive state, dilated fundus examination, visual acuity, ocular alignment, binocularity and color vision testing where appropriate, similar standards for vision screening do not uniformly exist, nor do integrally-related standards for ensuring follow-up care. This can allow for wide deviations in protocol and administration.

In order to ensure effective, quality pediatric vision screenings, Prevent Blindness America calls on the vision community to rally around a standard national protocol for vision screenings. We further believe that the Prevent Blindness America protocol should serve as the standard for volunteer-based screenings, as it relies on the guidance of a cadre of leading experts and is based on the continual review of scientifically-validated advances in vision and eye care.

To ensure our vision screening program is well designed, Prevent Blindness America relies on the guidance of its Scientific Advisors, including leading experts in child health and vision care from across the country, including ophthalmologists, optometrists, pediatricians, public health strategists, and vision and eye health researchers. To ensure our protocol is properly administered, Prevent Blindness America sponsors a unique national certification program for children’s vision screening and vision screening training. This certification is the central element to Prevent Blindness America’s program offerings and, as such, the designated minimum protocols must be strictly followed in order to maintain certification.

The approved vision screening protocol of Prevent Blindness America includes distance visual acuity testing and stereopsis testing using approved tools, as well as observation of the child and the child’s eyes. Additionally, a critical component of the screening is the referral for a comprehensive exam upon the suspicion of any potential problems, as well as appropriate follow-up with the child and the child’s caregiver. Further, it is always stressed that a screening is not a comprehensive exam and should not be seen as replacing one.

See Appendix B for the Prevent Blindness America Pediatric Vision Screening Program Protocol.

References
3. Ibid.
Our Efforts

In the best interests of the nation’s children, Prevent Blindness America commits to promoting well-designed, properly-administered vision screenings as an integral part of a public health approach to children’s vision and eye health by:

1. Working through the National Center for Children’s Vision and Eye Health to develop and promote guidelines for vision screening, mechanisms for uniform data collection and reporting, and state-based performance measures.

2. Regularly reviewing and updating our pediatric vision screening, training and follow-up protocols to ensure they reflect the most current evidence-based practices and are aligned with the guidance of the National Center for Children’s Vision and Eye Health.

3. Developing an online “Vision Screener Resource Center” populated with Prevent Blindness America training and screening resources, including best practices, videos, a bibliography of vision screening-related studies, etc. to ensure that Prevent Blindness America-certified trainers and screeners are fully educated about vision screening and its role in the continuum of eye health care.

4. Convening a National Vision Screening Training Summit aimed at ensuring all Prevent Blindness America-certified screeners are well trained, carefully certified and re-certified, and that training and certification programs are evidence-based and uniformly delivered.

5. Developing an eye health assistance online portal to serve as an avenue for seeking needed financial assistance resources for eye care services for those in need.

6. Establishing a technical assistance arm of the National Center for Children’s Vision and Eye Health to address capacity building, training, and the development of fully integrated approaches to children’s vision screening and linkage to care.

7. Advancing national vision screening standards, uniform data collection and reporting, and linkage to care in alignment with Prevent Blindness America protocols by establishing partnerships with key current and potential deliverers of children’s vision screening.
School Readiness and Vision

Our Vision: That all children receive a proper vision screening or examination within one year of beginning school and periodically throughout; and that those who fail a vision screening receive a full eye examination.
What We Know

• Vision disorders, including amblyopia, strabismus, and significant refractive errors, are the most prevalent disabling childhood conditions in the United States; yet only about 21 percent of preschool-age children have their vision screened, and only an estimated 14 percent of children receive comprehensive eye examinations before entering kindergarten or first grade.  

• According to the CDC, impaired vision can affect a child’s cognitive, emotional, neurologic and physical development by potentially limiting the range of experiences and kinds of information to which the child is exposed. 

• Requirements for preventive eye care prior to or during the school years vary broadly from state to state, with little consistency regarding type, frequency, referral or follow-up requirement protocol. 

• A study of the Michigan hearing and vision screening programs found that during the 2000–2001 school year, most children received follow-up care after an abnormal screen. 

Our Position

Prevent Blindness America supports public health efforts to ensure that vision problems do not unnecessarily detract from children’s ability to learn. In support of this position, Prevent Blindness America endorses state-based legislative efforts to ensure that all children are screened for vision problems prior to school entry, with appropriate follow-up eye examinations when necessary. 

Such legislation should include several key components:

• the establishment of key elements of an authorized pediatric vision screening, following nationally-recognized pediatric vision screening protocol; 

• the establishment of the parameters for authorizing lay vision screeners; 

• a requirement of follow-up comprehensive eye examinations for children failing the screening; 

• the establishment of key elements of a vision screening program, to include required dates, notification processes and alternatives to screening; and 

• the creation of an oversight commission where an appropriate body does not exist.

In advancing these proactive efforts to children’s school-entry vision screening legislation, Prevent Blindness America intends that no child be deprived of their rightful educational opportunity due to the enactment of such legislation; that the state should ensure adequate funding for such efforts; and that school-entry screening legislation should not supersede existing legislation related to vision screening throughout the primary school years, which is encouraged. If such ongoing vision screening is not already in place, we support efforts to require its inclusion.

Though we support efforts to ensure that children receive periodic professional eye care as a part of a continuum of preventive vision and eye health services, we do not endorse efforts to mandate full eye examinations for all children prior to school entry. However, should such efforts be advanced, we believe these mandates must, at a minimum, 1) not withhold educational opportunities or otherwise penalize children; 2) include adequate additional fiscal and other resources for monitoring and enforcing compliance; 3) provide sufficient means to deliver the required eye care to children whose families cannot afford to purchase that care; 4) accept any examination that includes the appropriate procedures and that is performed
by a healthcare provider acting within his or her legal scope of practice; 5) not undermine existing preventive vision and eye health services such as community- or school-based vision screening nor in any way hinder the continuation or development of such programs; 6) not hinder safety net programs; and 7) include appropriate measures for the timely assessment of their effectiveness in terms of relative economic costs and benefits in order to determine whether they justify the burden placed on parents, school and public health systems, and the society at large.

Finally, Prevent Blindness America supports efforts to mandate eye examinations for all children with special needs, as these children have higher rates of vision problems and may be misdiagnosed with a learning disability due to their vision problem.

Our Efforts
In the best interests of the nation’s children, Prevent Blindness America commits to ensuring all states have in place school-entry vision screening policies that meets a checklist of minimum standards, to include a mandatory exam component for failed screenings, by:

1. Promoting model state legislation and a checklist of minimum legislative standards on pediatric vision screening, to include a mandatory exam component for failed screenings.

2. Cataloguing existing state policies related to vision screening and exams and providing this state-by-state listing on the organization’s website.

3. Working to increase support of and attention to children’s vision initiatives in Head Start and Early Head Start children’s programs.

4. Securing federal funding to states to support children’s vision and eye health care by expanding vision care in the State Children’s Health Insurance Program, working with vision community partners to pass the Vision Care for Kids Act, and promoting model regulations for children’s vision and eye care within state health insurance exchanges.

5. Working closely with select pilot states through the National Center for Children’s Vision and Eye Health to develop and implement state-based strategies for vision screening, establish quality improvement strategies, and determine a mechanism for the improvement of data systems, performance measures, and reporting of children’s vision and eye health services.

6. Educating parents and caregivers about appropriate vision and eye health care for their children and those of their community through our Star Pupils initiative.

References
Children’s Eye Safety

Our Vision: That all children are appropriately protected from eye injuries in all settings.
What We Know

- Each year in the United States, hundreds of thousands of children receive eye injuries which could have been prevented with the use of proper safety precautions.\(^1\)
- Children suffer a disproportionate number of eye injuries, sustaining 27 to 52 percent of all ocular trauma.\(^2\)
- In 2008, there were an estimated 235,300 toy-related injuries treated in U.S. emergency rooms. Almost half of these were to the head and face.\(^3\)
- Nationally, just under 50 percent of all paintball injuries lead to blindness in the affected eye.\(^4\)
- Fireworks were involved in an estimated 8,800 injuries treated in U.S. hospital emergency departments during calendar year 2009, with 1,600 of these to the eye. Injuries to children are a major component of total fireworks-related injuries with children under 15 accounting for 39 percent of the estimated injuries.\(^5\)
- According to the Food and Drug Administration (FDA), decorative/cosmetic contact lenses (often used for Halloween costumes) present significant risks of blindness and other eye injuries if they are distributed without a prescription or without proper fitting by a qualified eye care professional.\(^6\)
- Acanthamoeba Keratitis is an infection of the eye which can lead to permanent visual impairment or blindness, yet can be avoided through the proper use of contact lenses.\(^7\)
- Mounting scientific evidence shows that exposure to UV rays can damage the eyes, leading to cataracts, skin cancer around the eyelids and even macular degeneration.\(^8\)
- Each year in the United States, there are approximately 600,000 documented sports-related eye injuries, over 42,000 of which require emergency room attention and an estimated 13,500 of which result in a permanent loss of sight. Approximately 72 percent of sports eye injuries occur in individuals younger than 25 years, and approximately 43 percent occur in individuals younger than 15 years.\(^9\)–\(^12\)
- Ninety percent of eye injuries can be prevented through understanding, safety practices and the use of proper eye protection.\(^13\)

Our Positions

Prevent Blindness America believes in the promotion and education of simple eye safety techniques to allow for the safe enjoyment of childhood activities at home, school and at play. To date we have developed position statements on five specific eye injury-related topics:\(^14\)

Children’s Sports Eye Safety Position Statement

In the interest of reducing the occurrence of sports-related eye injuries and blindness among children and adolescents who participate in athletics, Prevent Blindness America makes these recommendations:

- School and youth athletic league programs must educate children, coaches, and parents about the importance of wearing appropriate sports eye protection.
- Appropriate protective eyewear for sports should be chosen only after consultation from an eye doctor, physician, or athletic trainer and must be appropriate for the particular sport and the child’s size.
- Children and adolescents should only wear sports eye protectors that meet the standards set forth by the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI).
- State legislators should adopt legislation requiring the use of protective eyewear among children of any age when participating in medium to high-risk sports through school, youth leagues and collegiate athletic programs.
• Protective eyewear should be mandatory for athletes who are functionally 1-eyed.

• Sports eyewear that does not conform to the standards outlined by ASTM and ANSI should be banned by school, community and collegiate sport programs.

• Funding should be made available to help school, community-based and organized athletic programs pay for sports eye protectors for children who cannot afford them.

Cosmetic Contact Lens Position Statement
There are increasing reports of the dispensing of cosmetic contact lenses, without an appropriate prescription, by non-eyecare professionals such as boutiques, beach shops, tattoo parlors and other nonprofessional commercial vendors. Despite the facts that these lenses offer no visual correction, all contact lenses are classified as Class II or Class III medical devices by the Food and Drug Administration. Therefore, they can only be prescribed and fitted by licensed eye care professionals. In addition, sharing of cosmetic contact lenses has become commonplace. At a minimum, a comprehensive examination for a contact lens prescription includes a measurement of the refractive error, an evaluation of the shape and integrity of the cornea and the associated structures as well as the quality of the tear film. Successfully fitted contact lenses have three characteristics: 1) comfortable wear, 2) clear vision, and 3) no damage to the eye. It is easy for patients to evaluate comfort and quality of vision; however, only an eye care provider can evaluate the health of the eye.

Fireworks Position Statement
Prevent Blindness America supports the development and enforcement of bans on the importation, sale, and use of all fireworks and sparklers, except those used in authorized public displays by competent licensed operators, as the only effective means of eliminating the social and economic impact of fireworks-related trauma and damage. We support legislation that permits the public display of fireworks under controlled conditions by trained and licensed personnel, but bans the importation, general sale and indiscriminate use of all other types of fireworks by adults and children including “consumer” fireworks and sparklers.

Paintball Position Statement
Paintball presents the potential for injury, particularly serious eye injury, including loss of sight, and/or loss of an eye. Due to the risk of eye injury, Prevent Blindness America does not support or endorse the playing of paintball games. For those who do engage in paintball games, the following standards must be followed:

• Eye protection MUST be worn during ALL paintball activity.

• Only use eye protection certified by the Protective Eyewear Certification Council as meeting or exceeding the requirements of the American Society of Testing and Materials ASTM F1776–Standard Specification for Eye Protection Devices for Paintball.

• The manufacturers and distributors of paintball equipment, and the owners and operators of commercial paintball facilities must follow appropriate safety standards.

• Paintball activity should only be conducted in organized paintball facilities operated and supervised according to American Society of Testing and Materials ASTM F1777–Standard Practice for Paintball Field Operation.

References
• Paintball activity in unsupervised arenas, such as backyards and inside homes is strongly discouraged.

• Paintball markers (air guns) should be treated with the same safety precautions as firearms. The marker should be placed on safety and barrel plugs should be used when exiting a playing field. The marker should be unloaded, de-gassed, and locked in a storage unit when not in use.

• Those under the age of 18 years should not be allowed to engage in paintball games without constant adult supervision and the use of all age- and size-appropriate personal protective equipment, particularly eye and face protection. When paintball guns and pellets are not in use they should be properly secured to prohibit uncontrolled youth access to equipment.

UV Hazards
Prevent Blindness America recommends that everyone, including children, protect their eyes from the sun’s harmful rays. Sunglasses with UV protection can help boost the eyes’ ability to filter out the damaging rays. But if the sunwear doesn’t block UV rays, it may actually be more harmful to wear the sunglasses. See Appendix C for a detailed listing of eye safety tips.

Our Efforts
In the best interests of the nation’s children, Prevent Blindness America commits to reducing the incidence of home, school and recreational eye injuries in children through creating changes in unsafe individual behaviors by:

1. Continuing to distribute eye safety tips via our website and fact sheets.

2. Creating, expanding, and implementing programs and messaging to promote eye safety in the home, school, and recreational arenas.

3. Developing a sports and recreational eye safety awareness campaign.

4. Pursuing state initiatives for the wearing of protective eyewear for children active in medium or high-risk sports and those children who are functional in only one eye.

5. Educating parents and caregivers about appropriate eye safety for their children and those of their community through our Star Pups initiative.


Public Awareness and Understanding of Children’s Vision and Eye Health

Our Vision: That the public is appropriately informed and educated regarding children’s eye health, the need for preventive care and the avenues for achieving it.
What We Know

- There is a lack of understanding of when children can begin to experience vision problems. According to a recent survey, 27 percent of parents who have not taken their children for an eye exam recently believe that their children are too young to experience vision problems.¹

- One in five persons regard eye exams as only being necessary when a vision problem arises or when they need a pair of eyeglasses or a new vision prescription.²

- Slightly more than 50 percent of people claim they do not know the difference between a “vision screening” and an “eye exam.”³

- A leading preschool vision screening study recommends that public awareness about the importance of preschool vision screening should be improved through a national public health campaign.⁴

Our Position

Prevent Blindness America believes in the importance of education and information in affecting behavioral change.

We are committed to ensuring that vision-related information is available, accurate and accessible; and to promoting positive messaging related to children’s vision and eye health.

Our Efforts

In the best interests of the nation’s children, Prevent Blindness America commits to increasing public awareness and understanding of the importance of children’s vision and eye health.

1. Educating parents and caregivers about appropriate vision and eye health care for their children and those of their community through our Star Pupils initiative.

2. Developing and promoting a K-12 curriculum to provide school-based education around eye health and safety.

3. Continuing to educate parents and caregivers about amblyopia and ways in which to work with their children to fulfill appropriate treatment by promoting our Eye Patch Club and Amblyopia Forum.

4. Continuing the distribution of brochures, print public service announcements, and media outreach materials related to monthly awareness topics.

References

3. Ibid.
Pediatric Vision and Eye Health Research

Our Vision: That eye and vision research is adequately supported through funding and other resources, in order to achieve advancements in pediatric vision and eye health.
What We Know

- The knowledge base cited throughout this report and which serves as the basis for our vision preservation efforts is supported by laboratory, clinical and/or epidemiological research.
- There exists a relative lack of epidemiology in the area of pediatric vision and eye health.
- If a child becomes visually impaired, the additional costs for medical visits, home modifications and lost productivity are estimated at $601,000 over the child’s lifetime.¹
- The Pediatric Eye Disease Investigator Group (PEDIG), formed in 1997 and funded by the National Eye Institute (NEI) at the National Institutes of Health, exists as a collaborative network dedicated to facilitating multicenter clinical research in strabismus, amblyopia and other eye disorders that affect children.²
- Recent scientific advances, such as those related to the impact of gene therapy on visual function in Leber congenital amaurosis (LCA), highlight the important role of research in advancing and introducing treatment options for relatively rare eye conditions.³ ⁴
- Almost every major breakthrough in eye disease research has resulted from the support of the NEI through the funding it receives from Congress.⁵

Examples include:

> Using gene therapy, NEI-funded researchers have restored sight in dogs born blind with a severe form of retinitis pigmentosa that affects infants.⁶
> A new computerized risk assessment model developed by NEI-supported researchers proved effective in identifying low birth-weight, premature infants at the highest risk of developing severe vision loss from retinopathy of prematurity. This new model enables doctors to treat in the earliest stages of disease, thereby saving vision.⁷
> NEI clinical trials have established the value of eye patching and drug regimens for amblyopia.⁸

Our Positions
Prevent Blindness America is committed to promoting laboratory, clinical and epidemiological pediatric eye and vision research. This is accomplished primarily through the mobilization of grassroots expressions of support to Congress for protecting and increasing funding for federal pediatric eye and vision research initiatives, including those at the NEI and the CDC.

1. Continuing and strengthening our grassroots advocacy efforts to increase funding for federal pediatric eye and vision health research initiatives, including those at the NEI and the CDC.
2. Ensuring our own public education materials and vision screening protocols reflect the most current scientifically-validated information and approaches.
3. Supporting efforts to advance research for rare vision disorders, such as Project 3000, an initiative devoted to finding the causes and treatments for Leber congenital amaurosis (LCA).
4. Promoting and supporting external avenues for evaluating evidence-based science on children’s vision and eye health, including best practices and current gaps in evidence.
5. Continuing funding research through the Prevent Blindness America Investigator Awards, which provide funding for clinically-based research investigating public health issues related to the burden of illness of eye-related health and safety topics. All research grants must focus on preserving sight and preventing blindness.

Our Efforts

In the best interests of the nation’s children, Prevent Blindness America commits to advancing research regarding children’s vision and eye health and safety by:

- Ensuring our own public education materials and vision screening protocols reflect the most current scientifically-validated information and approaches.
- Supporting efforts to advance research for rare vision disorders, such as Project 3000, an initiative devoted to finding the causes and treatments for Leber congenital amaurosis (LCA).
- Promoting and supporting external avenues for evaluating evidence-based science on children’s vision and eye health, including best practices and current gaps in evidence.
- Continuing funding research through the Prevent Blindness America Investigator Awards, which provide funding for clinically-based research investigating public health issues related to the burden of illness of eye-related health and safety topics. All research grants must focus on preserving sight and preventing blindness.

References
6-8. Ibid.
Children’s Vision and Eye Health Logic Model
<table>
<thead>
<tr>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care education and training; promoting medical home concepts; increasing benefits.</td>
<td>There is a positive change in vision care delivery behaviors among all providers.</td>
<td>All children receive appropriate vision care at all levels of their healthcare delivery system.</td>
</tr>
<tr>
<td>+ Partner Activities</td>
<td>Systematic vision screening and training protocols and processes are established universally.</td>
<td>Vision screenings are conducted in a uniform manner and their role in vision health delivery is understood and respected.</td>
</tr>
<tr>
<td>National Center for Children’s Vision and Eye Health efforts; training screening partners; updating protocols; coordinating certifications.</td>
<td>+ Partner Activities</td>
<td>+ Partner Activities</td>
</tr>
<tr>
<td>Promoting model state legislation; advocating for funding to support states’ efforts.</td>
<td>All states adopt mandatory vision screening legislation, with mandatory exams for failed screenings.</td>
<td>Vision issues are lessened as a barrier to learning, with all children receiving attention to eye care.</td>
</tr>
<tr>
<td>+ Partner Activities</td>
<td>Eye safety behaviors in children and their families improve.</td>
<td>There is a reduction in the incidence of home, school and recreational eye injuries in children.</td>
</tr>
<tr>
<td>Distribution of safety tips; expansion of programs.</td>
<td>Increased knowledge and understanding of children’s eye health issues.</td>
<td>There is an increase in positive actions and behaviors related to children’s vision health.</td>
</tr>
<tr>
<td>+ Partner Activities</td>
<td>+ Partner Activities</td>
<td>+ Partner Activities</td>
</tr>
<tr>
<td>National PSA; communications action plan, monthly awareness PSAs.</td>
<td>Advances in scientific understanding of vision and eye health issues.</td>
<td>There are improvements in detection and treatment of pediatric vision conditions.</td>
</tr>
<tr>
<td>+ Partner Activities</td>
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<td>+ Partner Activities</td>
</tr>
<tr>
<td>Support for federal funding; Prevent Blindness America Investigator Awards; Vision Research month.</td>
<td></td>
<td>Improved Eye and Vision Health for Nation’s Children</td>
</tr>
</tbody>
</table>
Call to Action

As the nation’s leading voluntary health organization dedicated solely to the prevention of blindness and the preservation of sight, Prevent Blindness America commits to this national platform for the advancement of children’s vision and eye health. We call upon all organizations and individuals with an interest in children’s vision to join our charge—particularly those in the vision, healthcare, education and public health communities.

Let us all come together to collectively ensure the gift of sight for all our nation’s children.
Appendix A: Common Children’s Eye Problems

REFRACTIVE ERRORS
A refractive error is a defect in the optics of the eye that results in a lack of precise focus of the light rays of the retina, causing a blurred image. Light rays entering the eye cannot be brought to a single focus. Instead they may focus in front of, in back of, or irregularly on the retina.

Myopia (Nearsightedness)
Myopic or nearsighted people generally can see near objects clearly, but distant objects are out of focus. This is the result of a refractive error of the eye in which the image of a distant object is formed in front of the retina and cannot be seen distinctly; near objects are seen more clearly than distant objects.
• Myopia is thought to be primarily hereditary in nature.
• Myopia, the most common refractive error, affects more than 25 percent of the population.
• Myopia usually becomes evident in children between the ages of 8 and 12 and worsens until early adulthood.
• Myopia is rare in infants and toddlers.
• Myopia that starts in infancy can be more severe than in school-age children.

Hyperopia (Farsightedness)
Hyperopia occurs when the eyeball is too short. The reduced length means the point of focus lies beyond the back wall of the eye, and light rays are not yet in focus when they arrive at the retina. Hyperopic or farsighted people generally can see distant objects clearly, but near objects are out of focus. In more severe cases of hyperopia, even distant objects can be blurred.
• Hyperopia usually exists in infancy—as the child grows, so does the size of the eye. Most children lose much of their hyperopia by the time they are teenagers.
• Despite having hyperopia, most children can see well at all distances because the accommodation provided by the lens is enough to counteract minor refractive errors.

Astigmatism
The curvature of the cornea and/or lens prevents light rays from focusing on a single point on the retina, resulting in a blurred image. Visual acuity is poor for near and far objects.
• Astigmatism is an overall inability of the eye to focus clearly at any distance, usually because of uneven curvatures of the cornea. Essentially, the cornea is oval, having a surface shaped more like a football or the back of a spoon, rather than being rounded like a basketball.
• Virtually all corneas have at least a mild degree of astigmatism. For many, the resulting distortion is not discernible. But as the curvature of the cornea becomes more uneven, image distortion increases.
• Astigmatism often is inherited.
**Strabismus**

Strabismus refers to eyes that are not straight or properly aligned. As a result of eye muscles not working together, one eye may turn in (cross-eye), turn out (walleye), turn up or turn down. The deviation, or eye turn, may be constant or come and go. In some instances, it alternates eyes—first one eye turns and then the other. In very young children, there often is an appearance of false or pseudostrabismus caused by a wide spacing of skin between the eyes that covers more of the white of the eyes than in adults. Pseudostrabismus is a common source of vision screening over-referral that can be prevented by a correctly performed vision screening. It is critical for strabismus to be diagnosed and corrected at an early age because children with uncorrected strabismus may go on to develop amblyopia, a loss of vision in an eye that has not been used. In young children, strabismus may vary not only from one day to the next, but during the course of a single day. The condition usually will worsen if the child is ill, upset, or tired.

- Strabismus affects approximately 3 to 5 percent of children in the United States. Half of those with strabismus are born with the condition or usually develop it within the first six months of life.
- Some of the most common causes of strabismus are birth injuries, heredity, faulty muscle attachments, need for glasses and illness.
- Esotropia (inward) is the most common form of strabismus.
- Strabismus sometimes can be found in conjunction with cerebral palsy, prematurity and other neurodevelopmental conditions. Three out of four children with cerebral palsy have strabismus.

**Amblyopia**

Amblyopia is reduced vision in an eye that has not received adequate use during early childhood. An estimated 2 to 5 percent of the general population suffers from this visual impairment. If not treated early enough, an amblyopic eye may never develop good vision and may become functionally blind. A condition that causes amblyopia and is left untreated until about the age of six most often will result in some permanent visual impairment. However, it is important that the treatment of amblyopia be pursued until at least age ten. The critical age for treatment to prevent permanent vision impairment varies from individual to individual. The earlier treatment is started, the more likely it will be easy and successful. Amblyopia is detected by finding a difference in vision between eyes. Amblyopia treatment involves two steps. First, correct the underlying vision problem if the amblyopia is caused by a refractive problem. Second, correct the amblyopia by retraining the brain.

**Causes of Amblyopia**

Any condition that causes the brain to receive images of unequal quality from the two eyes can lead to amblyopia.

- Strabismus can lead to amblyopia. When one eye turns while the other is in straight gaze, a double image is sent to the brain. The brain solves the confusion by ignoring the message from the turned eye, which weakens from lack of use.
- Amblyopia can also be caused by anisometropia (unequal refractive error). Both eyes may be nearsighted or farsighted, but to differing degrees. Alternatively, one eye may be farsighted and the other nearsighted. When there is a marked difference in refractive error between the eyes, the brain sees differing images from the two eyes and eventually ignores the eye with the poorest images.
- Other factors causing a difference in image quality between the eyes, such as cataracts or drooping eyelid (ptosis), can cause amblyopia. The brain suppresses the image of poorer quality, causing permanent vision loss in the affected eye, unless treated.

**Reference**

Appendix B: Prevent Blindness America
Pediatric Vision Screening Program Protocol

Prevent Blindness America sponsors a unique national certification program for children’s vision screening and vision screening training. Protocols for certification are determined by the Prevent Blindness America Board of Directors, based on the recommendations of its Scientific Advisors, which consist of leading experts in child health and vision care from across the country.

This certification is a central element to Prevent Blindness America’s program offerings, and as such the designated minimum protocols must be strictly followed in order to maintain certification. If a program does not meet the minimum standards, it can no longer be referred to as a Prevent Blindness America-certified screening.

Prevent Blindness America Screening/Training Minimum Protocols

The minimum protocols discussed below are further detailed in Prevent Blindness America’s screening and training manuals.

Prevent Blindness America maintains three levels of certification. Each must be renewed, based upon Prevent Blindness America-approved standards, every three years.

- **Screeners** are certified to conduct Prevent Blindness America-certified screenings (adult and children’s programs require separate certifications).
- **Trainers** are certified to teach individuals to become screeners (must be a certified screener).
- **Instructors** are certified to teach screeners to become trainers (must be a certified trainer and Prevent Blindness America-affiliated staff, board member or individual designated by Prevent Blindness America). Instructor courses are taught by a designated Prevent Blindness America staff member.

A Prevent Blindness America-certified children’s vision screening must be led by a certified screener (non-certified volunteers may assist) and include:

- **Observation** (ABCs: Appearance signs, Behavior signs, Complaint signs)
- **Distance visual acuity screening** (utilizing Prevent Blindness America-approved screening tools) – approved passing line for three year olds is 20/50; for four and five year olds is 20/40; and for six year olds and older is 20/30
  - Preschool age: HOTV or Lea symbols 10-foot distance visual acuity charts
  - School age: Snellen or ETDRS distance visual acuity charts
- **Stereopsis screening** through 3rd grade or age 9 (utilizing Prevent Blindness America-approved screening tools)
  - Random Dot E or Stereo Smile stereopsis tool
- **Follow-up**

While the above screenings are preferred, the Photoscreener has also been approved for use with pre-verbal and special needs children and autorefraction (specifically the SureSight Vision Screener, the RetinoMax autorefractor and the PlusOptix Vision Screener) has been approved for use in screening 3-5 year old children, when used as recommended by the manufacturer and with the failed criteria approved by Prevent Blindness America. When using these instruments (SureSight, RetinoMax and PlusOptix), stereopsis (RDE or Stereo Smile) testing does not need to be done.

Further, Prevent Blindness America allows for affiliate use of a five-foot testing distance for preschool age children utilizing HOTV or Lea symbols in linear or single-surround with crowding bars formats; though it recognizes limited validation of this testing distance to date.

Prevent Blindness America also recognizes that computer-based testing of visual acuity for child vision-screening purposes is now available. Thus, Prevent Blindness America endorses the use of such technology if programmed to present testing methods that have been validated in children of similar ages that meet Prevent Blindness America approved standards based upon ATS, VIP, or AAP protocol.

Data Tracking

Prevent Blindness America has established a National Vision Screening Database, which is available for use by all Prevent Blindness America-certified programs.
Appendix C: Prevent Blindness America
Eye Safety Tips

The eye safety tips listed below, along with related statistics, can be found on various web pages and fact sheets available on the Prevent Blindness America’s website, PreventBlindness.org.

Contact Lenses (including Cosmetic Contact Lenses)
• Always visit a licensed eye care professional to be fitted for contact lenses.
• Always wear contact lenses under the supervision of an eye care professional.
• Always clean and disinfect contact lenses according to instructions.
• Always store contact lenses properly in a clean storage case.
• Always use water-soluble cosmetics or those labeled safe for use with contact lenses. Do not apply skin creams or moisturizers too close to the eyes.
• Never buy contact lenses without a prescription.
• Never go to sleep while wearing cosmetic lenses.
• Never wear opaque lenses if you have any problems with night vision.
• Never share or trade your contact lenses with friends.
• Remove contact lenses before swimming or using a hot tub, taking a shower or bath, or any other activity in which water gets in your eyes.
• Seek medical attention immediately if you experience any pain, irritation, redness, blurriness or visual changes.

Toys
• Avoid toys that shoot or include parts that fly off.
• Slingshots and even water guns are dangerous because they invite children to target other kids.
• BB guns should not even be considered toys.
• Inspect toys for solidness.
• Your child’s toys should be durable with no sharp edges or points. The toys should also withstand impact.
• Look for the letters “ASTM.” This means the product meets the national safety standards set by the American Society for Testing and Materials (ASTM).
• Read directions carefully and follow suggested age levels. Ask yourself if the toy is right for your child’s ability and age.

Halloween
• Avoid costumes with masks, wigs, floppy hats or eye patches that block vision.
• Tie hats and scarves securely so they don’t slip over children’s eyes.
• Avoid costumes that drag on the ground to prevent tripping or falling.
• Avoid pointed props such as spears, swords or wands that may harm other children’s eyes.
• Wear bright, reflective clothing or decorate costumes and bags with reflective tape/patches.
• Carry a bright flashlight to improve visibility.
• Do not ride a bike/scooter/skateboard or roller blade while wearing a costume.
• Obey all traffic signals—pedestrian and driver.
Younger children should go with an adult while trick-or-treating around the neighborhood. Older children should trick-or-treat in groups.

Use common sense. Never dart out between parked cars or from hidden corners such as alleys. Avoid streets under construction. Don’t trick-or-treat in busy commercial areas or where there is heavy traffic.

Go trick-or-treating in daylight, as it is safer than going after dark. A safer option is to go to a Halloween party instead of trick-or-treating.

Cosmetic contacts that make your eyes look like cat’s eyes may seem like fun, especially at Halloween. However, these lenses come with the same risks as regular contact lenses. This growing fad may seem harmless, but it is not!

Improper use of cosmetic lenses can lead to serious eye complications. These problems include bacterial infections, swelling, eye pain, sensitivity to light, conjunctivitis (pink eye), corneal scratches, corneal ulceration and even permanent loss of sight.

Never buy cosmetic contacts without a prescription! Never share your cosmetic contacts with others or use someone else’s contacts.

Cosmetic contacts are popular among teens. Be vigilant about older kids’ appearance before letting them leave the house. If they are wearing these contacts, ask where they got them.

Avoid giving young kids lollipops as the sticks can cause eye injuries.

Be sure your lawn, steps, porch, and front door are well lit and free from obstacles.

**Paintball**

*Prevent Blindness America does not believe children should participate in paintball games. The following tips are provided as a resource for those who do not follow this recommendation:*

- Eye protection must be worn during all paintball activity. Only use eye protection certified by the Protective Eyewear Certification Council as meeting or exceeding the requirements of the American Society of Testing and Materials ASTM F1776—Standard Specification for Eye Protection Devices for Paintball.

- The manufacturers and distributors of paintball equipment, and the owners and operators of commercial paintball facilities must follow appropriate safety standards.

- Paintball activity should only be conducted in organized paintball facilities operated and supervised according to American Society of Testing and Materials ASTM F1777—Standard Practice for Paintball Field Operation.

- Paintball markers (air guns) should be treated with the same safety precautions as firearms. The marker should be placed on safe and barrel plugs should be used when exiting a playing field. The marker should be unloaded, degassed and locked in a storage unit when not in use.

**Safe Summers/Fireworks**

- You can ensure your children’s safety by supervising their activities and their environment. Instead of worrying about what might be going on in your neighborhood, you can be what’s going on in the neighborhood. Host a Fourth of July party for your kids and their friends.
  > Let your guests make the decorations. Kids can make cute decorations from crepe paper, construction paper, stickers and glue. These will provide fun and make the party look festive. Local craft or hobby shops have the supplies and lots of good ideas.
  > Let the kids decorate T-shirts or hats with paint and decals that glow in the dark. When evening rolls around, their new night-bright clothes will be dry and ready to model.
  > Take the kids to a professional fireworks show. Check your local paper for times and locations of displays in your area.
  > Provide safe sounds and sparkles (see lists on next page).

- Part of fireworks’ attraction to children is the big noise that goes with them. Kids love making noise and there are lots of safe ways for them to do this.
  > Step or sit on inflated balloons until they pop.
  > Inflate small bags (lunch bags are a good size). Popping the bags makes a nice, loud “BANG”.
  > Buy noisemakers from a party store. Different brands and types of noisemakers make many unique and loud sounds.
Bring out your old pots, pans and pie plates. The kitchen cacophony should be quite satisfying to the noise-making set.

Horns, whistles, bells and cymbals will also serve as sound fun.

The other attractive part of fireworks is the glitter. Here are some safe, fire-free tips.

- Glo-sticks, glo-ropes and glo-jewelry provide safe and fun ways to brighten an evening.
- Flashlights, plain or with filters, made by wrapping the flashlight in colored cellophane, can light the night in fun, safe ways.
- Neon and glow-in-the-dark paint can provide both a fun afternoon project and a special evening display. Kids enjoy watching their art take on a special glow as the sky darkens.
- A jar of fireflies or lightening bugs can provide lots of fun. Nature’s little sparklers provide a fun challenge to young insect hunters. Just remember to release the bugs before the hunters go to bed!
- Novelty flashlights can be extra fun. You can buy flashlights that have mirrors to bounce the light, and changeable colored filters or optic fibers that look like sparklers but are much safer.

While there are lots of advantages to hosting a party on Independence Day, it is important to remember that most fireworks accidents happen during the entire month surrounding the holiday.

- Explain to your children why you don’t want them around non-professionals who are shooting off fireworks: Neighbor “Fred” may be a great guy, but he isn’t a professional at pyrotechnics.
- “I wasn’t going to shoot off anything, I was just going to watch.” Because bystanders are more frequently injured than those doing the lighting, this isn’t a good solution. Be sure your child knows that you don’t want him/her anywhere around consumer fireworks.
- It is important that you discuss fireworks with your children. Be sure they understand how you expect them to act around consumer fireworks. A little role-playing may help give your child the confidence to say “No”. There will be many times that your child will need to say no to friends and peers. Help him/her practice now.

Should the worst happen…If a child’s eye is injured in a fireworks accident, what should you do?

If there are specks in the eye...
- DO NOT rub the eye.
- Use an eye wash or let tears wash out the speck.
- Lift upper eyelid outward and down over the lower lid.
- If the speck doesn’t wash out—keep the eye closed, bandage lightly and see a doctor.

Cuts and punctures of eye and eyelid...
- DO NOT wash out the eye with water.
- DO NOT try to remove an object stuck in the eye.
- Cover the eye with a rigid shield without pressure. The bottom half of a paper cup can be used. See doctor at once.

UV Radiation/Sunglasses for Children

- Shop for sunglasses that block 99–100 percent of both types of ultraviolet rays: UV-A and UV-B. Sunglasses should also eliminate glare and squinting. Be wary of labels that claim a product blocks harmful UV without specifying exactly what amount of UV rays they block.

- Look at the lenses carefully for scratches, bubbles, and distortions. Here’s an easy test for non-prescription lenses: hold the glasses away from your eyes and look at a good horizontal or vertical line, such as a window frame. Look through the lenses and check if the line appears straight. If the line appears wavy, the glasses may actually make it more difficult to see (although some distortion may be seen with prescription lenses for corrective purposes). Flaws and distortion in the lenses may cause your child’s eyes to work harder and result in squinting, blinking, tearing and possibly even slight headaches.

- Check the sunglasses periodically to make sure they fit well and are not damaged. Children often don’t complain about their vision even when there is a problem. A regular check of their glasses is a good idea.

- Select sunglasses that suit children’s active lifestyles. The glasses should be impact resistant, lenses should not pop out of the frames and the frames should be bendable, unbreakable and/or have snap-on temples.

- Check the label to ensure the lenses are made of polycarbonate, the most impact resistant material available. Children’s sunglasses should never be made of glass (unless required by their eye doctor). Polycarbonate lenses are the best choice for active children.
• Have the child try on the sunglasses before making a purchase. The lenses should be large enough to shield the eyes from most angles (above, below and either side) and to block light that enters in around the frames. The sunglasses should also fit snugly against the bridge of the child’s nose—again to reduce the amount of sunlight that enters the eyes.

• Choose a wide-brimmed hat for your child to maximize protection. The hat can cut the amount of UV exposure in half. The price for non-prescription sunglasses ranges from $2 to $50, or more for designer lenses. Fashion should be the last thing you think about when buying sunglasses. Look at the amount of UV protection, lens quality, and durability to assure that you buy the right sunglasses for your child.

Home Safety Tips

• Actions often speak louder than words. Adults who wear eye protection are teaching their kids a valuable lesson.

• Teach children not to run around with forks, knives, combs, or toothbrushes.

• Keep detergents, cleaning supplies, nail polish remover, mouthwash, and makeup in locked cabinets or out of reach.

• Set a good example by wearing eye protection when using ammonia-based cleaning supplies.

• Keep clothes hangers in the closet.

• Don’t allow children to play with small, pointed, or sharp toys or objects in bed.

• Don’t allow young children to use combs, brushes, or hairspray unless you watch or help.

• Teach children to put toys away.

• Keep toys for older kids away from younger kids.

• Tell children not to throw toys or objects at each other.

• Repair or throw away broken toys. Take recalled toys back to the store where you bought them.

• Place nails, glue, screwdrivers and other tools out of reach of children.

• Keep younger children away from work areas where power tools are being used.

• Set a good example by always wearing eye protection while working on projects.

• Prompt others who enter the work area to wear eye protection.

• Teach kids to wear the right eye protection when playing baseball, basketball or other types of contact sports.

• Make sure children who wear prescription glasses play contact sports with proper eye protection.

• Work together with your kids to create a list of eye safety rules they should follow when they are playing.

Sports Safety Tips

• Using the right kind of eye protection while playing sports can help prevent serious eye injuries and even blindness.

• If you wear prescription glasses, ask your eye doctor to fit you for prescription eyeguards.

• If you’re a monocular athlete (a person with only one eye that sees well), ask your eye doctor what sports you can play safely. Monocular athletes should always wear sports eyeguards.

• Buy eyeguards at sports specialty stores or optical stores. At the sports store, ask for a salesperson who is familiar with eye protectors to help you.

• Don’t buy sports eyeguards without lenses in them. Only protectors with lenses are recommended for sports use. Make sure the lenses either stay in place or pop outward in the event of an accident. Lenses that pop in against your eyes can be very dangerous.

• Fogging of the lenses can be a problem when you’re active. Some eyeguards are available with anti-fog coating and others include side vents for additional ventilation. Try on different types to determine which is right for you.
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Our One Purpose: Saving Sight

Founded in 1908, Prevent Blindness America is the nation’s leading volunteer eye health and safety organization dedicated to fighting blindness and saving sight. Focused on promoting a continuum of vision care, Prevent Blindness America touches the lives of millions of people each year through public and professional education, advocacy, certified vision screener training, community and patient service programs, and research.

These services are made possible through the generous support of the American public. Together with a network of affiliates, divisions, and chapters, it’s committed to eliminating preventable blindness in America.

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