I. INTRODUCTION

In February 2001, the National Eye Institute (NEI), Office of Communication, Health Education, and Public Liaison awarded Macro International Inc. (ORC Macro) a contract to assess the current status of State Health Departments' vision related policy and programmatic efforts. NEI was interested in gathering information regarding (1) gaps that may exist in states' vision policies/programs and, (2) recommendations about how NEI may assist State health agencies in meeting their vision objectives.

Three project goals were identified-

- 1. To gather data on each state's vision position including goals and objectives they may have set.¹
- 2. To gather information about vision related programs that have been developed and implemented by each state.
- 3. To identify ways in which NEI, through its National Eye Health Education Program, can assist states.

In order to meet these goals, ORC Macro developed a plan that contained six tasks-

- 1. Meet with NEI staff to review work plan, discuss study methods, and identify stakeholders.
- 2. Identify at least one stakeholder in each state and the District of Columbia.
- 3. Develop a discussion protocol that would be e-mailed to stakeholders.
- 4. Conduct the discussion either by e-mail or telephone.
- 5. Analyze the data.
- 6. Prepare a final written report for NEI.

A detailed description of the study methodology is presented in Section II of this report. Information that each state provided about its goals and objectives, use of Healthy People 2010 vision objectives, specific eye health programs, and how the National Eye Institute could better assist their state health departments, is presented in Section III: Findings. The final portion of the report, Section IV: Summary and Recommendations, summarizes the key findings. Suggested recommendations based on these findings are put forth for NEI's consideration.

II. METHODOLOGY

In February 2001, ORC Macro met with NEI to review the proposed management plan, review project goals, and discuss how this effort would be accomplished. NEI and ORC Macro agreed to use e-mail as the primary means of collecting information. However, at the stakeholder's request, ORC Macro would hold discussions by telephone.

¹ This included the 50 states and the District of Columbia.

A. IDENTIFICATION OF STAKEHOLDERS

ORC Macro used the list of state directors of the Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE) to generate an initial list of stakeholders. This list, available from their Web site http://www.astdhpphe.org, contains the name, e-mail address, and telephone number for each voting member of the association. Members were not listed for the District of Columbia, Maine, and Nebraska. For these two states and the District of Columbia, ORC Macro contacted the health department by telephone and/or by Internet to identify a stakeholder. An e-mail address was not listed for South Carolina in the list of state directors. Ultimately a stakeholder was identified in each of the 50 states and the District of Columbia.

B. PROTOCOL DEVELOPMENT

ORC Macro prepared a discussion protocol suitable to e-mail to stakeholders that was approved by NEI. The e-mail included introductory paragraphs explaining that NEI was seeking information about each State Health Department's eye health policy and programmatic efforts and that NEI had contracted with ORC Macro to gather this information.

The protocol contained discussion items on the following 10 topics-

- 1. State eye health goals and/or objectives
- 2. Use of Healthy People (HP) 2010 to guide state eye health policies and programs
- 3. Eye health programs that state health departments implemented
- 4. Organization of the state health department
- 5. Eye health programs offered by other state level agencies
- 6. Eye health programs that county health departments implemented
- 7. Information sharing between state health department and county/municipalities
- 8. Suggestions on how NEI can assist the state
- 9. State HP 2010 contact
- 10. Name/address to which NEI publications can be sent.

The protocol that was e-mailed to ASTDHPPHE State Directors is shown in Appendix A.

C. DATA COLLECTION PROCEDURES

ORC Macro designed and used a State Health Department Tracking Form to monitor the delivery and receipt of e-mails and/or telephone conversations. On February 12, 2001, the first wave of e-mails was sent to all the stakeholders with the exception of District of Columbia, Maine, Nebraska, and South Carolina (see Appendix A, pages 1-2). Stakeholders were identified for these three states and the District of Columbia shortly thereafter and an e-mail was sent to them. Each email was marked "urgent" and return receipt. Stakeholders were asked to email the name(s) of appropriate people that ORC Macro should contact, along with their e-mail address and phone number by February 20, 2001. E-mails that were returned "undelivered" were noted and the stakeholder was contacted via telephone. If the stakeholder was no longer at the agency, ORC Macro identified a new contact person.

On February 21, 2001, a reminder e-mail was sent to stakeholders in 34 states asking for their response by February 26, 2001 (see Appendix A, pages 3-4 for sample reminder e-mail). Again, on March 6, 2001, stakeholders who had not responded were sent another reminder e-mail requesting a response by March 14, 2001. A final e-mail reminder was sent out to those states that had not responded by March 21, 2001. Those who did respond were sent an e-mail thanking them for taking the time to respond to the discussion items. A copy of the e-mail with discussion items that was sent to identified stakeholders is shown in Appendix A, pages 5-6.

D. Response Rate

Thirty-eight states and the District of Columbia responded to our request for information about their state's eye health programs. As shown in Table 1, the majority (66.7%) of stakeholders replied by e-mail. The overall response rate for this project was 76.5 percent.

Response	Number of States	Percent
E-mail	34	66.7%
Telephone	4	7.8%
E-mail and telephone	1	2.0%
Did not respond	12	23.5%
Total	51	100%

Table 1: Response

Despite repeated attempts by e-mail and telephone, the following 12 states did not respond—

Alaska California Connecticut Maryland Massachusetts Minnesota Nevada New Mexico Oregon South Carolina Tennessee Virginia

E. DATA ANALYSIS

In order that coding categories could be established, stakeholders' responses to all items were carefully reviewed. ORC Macro developed a codebook and entered each state's data into an SPSS (Statistical Package for the Social Sciences) database for analysis. Frequency counts and distribution tables were generated. ORC Macro analyzed the open-ended responses using content analysis in order to identify patterns and themes and report how frequently they emerged. Contact names and addresses were entered into separate MS Word files by state.

III. FINDINGS

A. INTRODUCTION

It must be noted that many stakeholders did not respond to every item in the protocol. In fact, the stakeholders from Louisiana, Oklahoma, and Vermont, simply stated that their state did not have any eye health programs and did not respond to any other discussion items. The stakeholder in Montana wrote "I am brand new to state government. After reading through the questions, I don't think I can supply any information that answers the specific questions asked." Thus it is unclear whether or not Montana has any eye health programs in their state health department. Although stakeholders in Alabama, Colorado, and New Jersey, reported that their State Health Department did not have any eye health programs, these respondents did provide a response to one or more of the other discussion items. Because of the different response rates, caution should be used in interpreting frequency count information. The remainder of this section and more detailed information can be found in the appendices.

B. EYE HEALTH GOALS AND/OR OBJECTIVES OF STATE DEPARTMENTS OF HEALTH

The discussion protocol asked stakeholders to identify any written goals and/or objectives that their health department established related to eye health. Stakeholders from 32 states responded to this item. As shown in Table 2, 50 percent of the stakeholders who responded to this question said their state health department had eye health goal(s)/objective(s). Respondents from 2 states reported that their state had a state law governing vision screening and another had a law requiring the health department to develop a blindness prevention education, screening, and treatment program. Two other states had both goals/objectives and a state law, and 11 stakeholders (34.4%) reported that their state did not have any goals/objectives.

Response	Number of States	Percent
Yes, have goals/objectives	16	50.0%
Yes, have law	3	9.4%
Yes, have goals/objectives and law	2	6.2%
No goals/objectives	11	34.4%
Total	32	100%

Table 2: F	Eye Health	Goals and/or	Objectives
------------	------------	--------------	------------

A review of the goals, objectives, and laws that the stakeholders from 21 states wrote about reveals that—

Fourteen states and the District of Columbia have specific goals/objectives related to diabetes. The states include Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Maine, Nebraska, North Carolina, North Dakota, New Jersey, Rhode Island, Utah, and Wisconsin.

Four states have goals/objectives related to vision screening—Arkansas, Indiana, Ohio, and West Virginia.

- Four states have a law related to vision screening—Illinois, Kentucky, Michigan, and Rhode Island.
- Two states have goals/objectives related to eye examinations—Indiana and West Virginia.
- Two states have goals/objectives related to occupational injury—West Virginia and Wisconsin.
- One state (Missouri) has a state law requiring the Health Department to create the Blindness Prevention, Education, Screening, and Treatment Program.
- One state (West Virginia) has an objective to reduce visual impairment due to glaucoma.
- One state (West Virginia) has an objective to reduce visual impairment due to cataract.

The verbatim state health department eye health related goals, objectives, and laws cited by the stakeholders are presented in Appendix B in alphabetic order by state. The majority of goals and objectives were established in the late 1990s.

C. HEALTHY PEOPLE 2010

The discussion protocol informed stakeholders that vision objectives had been included in Healthy People (HP) 2010. Respondents were asked to comment on whether or not their state uses the HP framework to guide their health policies and programs related to eye health. Stakeholders from 27 states and the District of Columbia responded to this item. The majority (N=19, 67.9%) said that the HP framework guides their eye health policies and programs. One stakeholder (3.6%) did not know and the remaining 8 respondents (28.6%) reported that the HP framework did not guide their eye health policies and programs.

States that use the HP 2010 framework include-

Arkansas	Mississippi
District of Columbia	Missouri
Delaware	North Dakota
Florida	North Carolina
Indiana	Pennsylvania
Illinois	Rhode Island
Iowa	Utah
Kansas	West Virginia
Kentucky	Wisconsin
Michigan	

The respondent from Colorado did not know whether or not Colorado used the HP 2010 framework to guide its eye health policies and programs, and stakeholders from Alabama,

Maine, Nebraska, New Jersey, New York, Ohio, Texas, and Washington, specifically stated that their state did not use the HP framework.

Sample comments include:

- Florida: "The State Diabetes Control Program uses HP 2010 initiatives for eye examinations as the basis for long-range planning and in the development of state objectives."
- Kansas: "The State Health Department does use HP as a framework for programs and encourages all other partners to do so as well."
- Kentucky: "Utilized the Healthy People 2010 objectives in developing their 'Healthy Kentuckians 2010' diabetes chapter."
- Michigan: "We as cognizant of the vision goals of Health People 2010, and our screening programs for children are congruent with the objectives of identifications, prevention, and treatment of vision problems."
- North Carolina: "While NC uses HP 2010, we are more guided by national objectives set forth by the CDC Diabetes Translation Division, which is their chief funder."

New Jersey: "No, I am just learning about HP2010 eye health objectives."

- North Dakota: "North Dakota is beginning the process of developing a Healthy People 2010 state plan."
- Ohio: "We have related the HP 2010 objectives to our needs assessment process for the Maternal and Child Health (MCH) block grant, but we do not specifically develop programs through that framework. We are primarily driven by MCH block grant performance measures established by the federal MCH bureau and by additional state negotiated performance measures."
- Pennsylvania: "[Pennsylvania] is cognizant of the HP2010 objectives concerning the prevention of vision impairment in children and continues to emphasize activities that relate to those objectives."

Rhode Island: "Our state uses HP 2010 as a guide and will continue to do so in the future."

Wisconsin: "Healthy People 2010 helps to focus Department priorities."

As a follow-up item, the protocol asked stakeholders whether or not they anticipate that HP 2010 vision objectives will guide their state's future eye health programs and policies. Representatives from 29 states and the District of Columbia responded to this item. Fourteen stakeholders (46.7%) affirmed that HP 2010 vision objectives would guide them. Four stakeholders (13.3%) thought the objectives would possibly guide their future eye health programs and policies, one respondent (3.3%) did not know, and the remaining 11 stakeholders (36.7%) said HP 2010 vision objectives will not guide their future eye health programs and policies.

States that will use HP 2010 vision objectives to guide their state's future eye health programs and policies include—

Arkansas	Kentucky
District of Columbia	Maine
Delaware	Missouri
Florida	North Dakota
Hawaii	Utah
Idaho	West Virginia
Iowa	Wisconsin

Stakeholders from Kansas, Mississippi, Ohio, and Texas stated that HP 2010 vision objectives might guide their state's future eye health programs and policies, while the representative from Colorado was uncertain. States that do not plan to use the HP 2010 vision objectives include Alabama, Georgia, Illinois, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Washington, and Wyoming.

Sample comments regarding the use of HP 2010 vision objectives include-

- Arkansas: "Yes, the Arkansas Vision Screening Program will adopt HP 2010 vision objectives."
- Georgia: "We do not plan to use the HP 2010 in a formal way—only as they touch on other conditions such as diabetes and vision screening."

Illinois: "Not really. Our statute for screening is long standing and we don't really have staff or funding for new initiatives."

Kansas: "Kansas is still in the process of completing Healthy Kansans 2010 objectives. We have not yet developed any eye health objectives."

Kentucky: "We will continue to look at the National Objectives in developing our state objectives."

New Hampshire: "New Hampshire's Department of Maternal and Child Health did not include any eye health related objectives in its HP NH 2010."

- Ohio: "The HP 2010 vision objectives may be considered, especially in conducting community needs assessments. However, they would have more impact if their level of importance was reflected in the policies of other federal agencies, i.e., Maternal and Child Health Bureau."
- Utah: "Yes, [we plan to use HP 2010 vision objectives to guide our state's future eye health programs and policies] related to diabetes."

Washington: "Only if there is federal money to set up a state program/project in this area."

Wisconsin: "The Department is working on the objectives in the area of occupational health and diabetes. They provide a framework for us to work towards."

D. EYE HEALTH PROGRAMS

One of the goals of this project was to gather information about vision related programs that state health departments had implemented. In order to gather this information, stakeholders were asked what, if any, eye health programs their state health department had implemented. For those who had a program(s), stakeholders were queried about whether or not the program targeted groups at higher risk for eye disease and disorders, the number of people reached by the program, and questions about funding.

Of the 38 states and the District of Columbia that responded to the assessment, 23 (59%) indicated that they had some type of eye health program. Stakeholders in the remaining 16 states (41%) reported that their state health department did not have any eye health programs.

States that reported having eye health program(s) include—

Arizona	Missouri
Arkansas	Nebraska
Delaware	New Hampshire
District of Columbia	New Jersey
Georgia	Ohio
Illinois	Pennsylvania
Indiana	Rhode Island
Iowa	South Dakota
Kentucky	Texas
Maine	Utah
Michigan	Wisconsin
Montana	

States that reported no eye health programs include-

Alabama	New York
Colorado	North Carolina *
Florida *	North Dakota *
Hawaii	Oklahoma
Idaho	Vermont
Kansas *	Washington
Louisiana	West Virginia
Mississippi	Wyoming

*Stakeholders reported that their state had a Diabetes Control Program, but did not consider it an eye health program.

A description of the program(s) each state implemented in presented in Appendix C in alphabetical order by state. A discussion of these programs is presented below by type of program.

1. DIABETES EYE HEALTH PROGRAMS

One of the primary program activities of state health departments that have an eye health component concerns diabetes. All 50 states, the District of Columbia, and eight U.S.-affiliated jurisdictions receive funding from Centers for Disease Control and Prevention (CDC) to develop diabetes control programs (DCP). States may use the money to fund their diabetes-related eye disease activities, including vision screenings and dilated eye exams.

While this assessment did not ascertain which state eye health programs received their funding from CDC, 16 states—California, Illinois, Massachusetts, Michigan, Minnesota, Montana, New York, North Carolina, Ohio, Oregon, Rhode Island, Texas, Utah, Washington, West Virginia, and Wisconsin—receive what is called expanded funding (\$800,000 each) to establish comprehensive programs so they can implement statewide, multilevel public health approaches to reduce the burden of diabetes.²

The health departments of the remaining states and territories receive an average of \$232,000 each to develop initial expertise, define the scope of the problem, identify gaps, and develop limited intervention projects, which may include diabetic eye disease programs.

Stakeholders in Delaware, Georgia, Iowa, Kentucky, Maine, Nebraska, Pennsylvania, Rhode Island, Texas, Utah, and Wisconsin referred to their Diabetes Control Program and funds that are being used to increase the percentage of persons with diabetes who receive a dilated eye examination. The Iowa Department of Public Health funded a diabetes program targeting African Americans for retinal exams. In Utah, the Diabetes Control Program in the Department of Health works with seven health plans to implement an incentive program that targets those with diabetes. If the plan member receives an eye examination within the calendar year, the member receives a 60-minute telephone calling card. In Kentucky, the Chronic Disease Prevention and Control Branch recently began an eye project with public and private health plan partners. The goal of the project is to increase the number of annual eye exams for persons with diabetes. The project is just beginning, so the stakeholder was unable to provide many details.

For the past 15 years, the New Jersey Department of Health and Senior Services provides a \$95,000 grant to the New Jersey Commission for the Blind and Visually Impaired. This grant provides funds to screen at least 800 people with diabetes who are uninsured or underinsured.

Interestingly, stakeholders in Florida, Kansas, North Carolina, and North Dakota wrote that their state health departments **did not** have eye health programs, but do have Diabetes Control Programs that do not have specific funds targeted for eye health. While their diabetes program "does not have any specific eye health program," the respondent from North Carolina wrote, "they do participate in the NIH/CDC National Diabetes Education Program that promotes

² Information about the CDC's Diabetes Program was obtained from the Diabetes Public Health Resource of the CDC National Center for Chronic Disease Prevention and Health Promotion at www.cdc.gov/diabetes/states/index.htm.

controlling diabetes for life (which includes preventing diabetic retinopathy and blindness)." North Dakota has a diabetes control program that targets eye health, but the stakeholder knew of no specific funding for eye care in the health department.

The stakeholder from Washington wrote, "at one time, the Diabetes Control Program had a Diabetic Eye Project...the program offered free dilated eye exams to uninsured people with diabetes in community care clinics. This program was phased out 3 years ago with the administration turned over to the professional association of ophthalmologists."

2. VISION SCREENING PROGRAMS

Stakeholders in 12 states Arizona, Arkansas, Georgia, Illinois, Indiana, Kentucky, Michigan, New Hampshire, Ohio, Pennsylvania, Rhode Island, and South Dakota described their visionscreening programs. Georgia and Illinois specifically mentioned the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services that are provided to qualified residents under the age of 21. EPSDT is Medicaid's comprehensive and preventive child health program for individuals under the age of 21. Vision components of the program must include, at a minimum, diagnosis and treatment for defects in vision, including eyeglasses. Vision services must be provided according to a distinct schedule developed by the state and at other intervals as medically necessary.

Each state's Medicaid Agency is required to inform all Medicaid-eligible persons under age 21 that EPSDT services are available; to set distinct periodicity schedules for screening, dental, vision, and hearing services; and to submit a report annually.

Most states that conduct vision screening do so for preschool and school age children. In Arizona, the Department of Health Services strongly encourages vision screening for children pre-kindergarten through 12th grade in public and private school, but it is a voluntary program. In Arkansas, the Department of Health's Vision Screening Program (VSP) provides training, limited loans for screening equipment, and technical assistance to ensure quality vision screenings are conducted in schools. Students who are identified with a vision problem during the screening are re-screened and, if needed, referred for a professional exam. During the 1999–2000 school year, 234,195 students were screened. Of these, 11,036 students received a professional eye exam. Ninety percent of these students had a confirmed vision problem.

Illinois, Kentucky, Michigan, and Rhode Island have state laws requiring that children have their vision screened. In Illinois, all children ages 3 and up, in any organized daycare/preschool program must have their vision screened annually. Kentucky recently passed a law stating that all students must have an eye exam when they enter the school system for the first time. Rhode Island recently passed a law to design a vision screening program for children. This program will target children 3 to 5 years old.

Michigan's vision screening program focuses on children ages 3 to 21 years of age. They screen just under a million children annually. Preschool children ages 3 to 5 are screened at least once before they enter school, and school age children are screened in the odd grades through 11th grade. Approximately 200 qualified vision technicians, who are hired by the county health departments, conduct the screenings in Michigan.

New Hampshire has a vision/hearing screening program that provides statewide screening for children ages 3 to 6 who have not had their vision screened. They screen approximately 2,000 children each year. In Ohio, the Department of Health sets the requirements for what grades are routinely screened each year, what equipment can be used, what vision tests are used, and referral criteria. Children who do not pass the screening are referred to their medical providers or may attend the Department's Hearing and Vision Specialty clinics.

The Pennsylvania Department of Health's School Health Program administers and provides partial reimbursement for vision screening in all grades. The only routine eye health provided school age children in South Dakota is vision screening.

While the majority of vision screening programs that states implemented are targeted to children 21 years and younger, the Indiana State Department of Health has provided the University of Indiana with funds to purchase equipment for eye screening in three rural health clinics. This program will provide new access to affordable optometry services.

The Kentucky Department of Public Health recommends that adults at high risk for glaucoma— African Americans over age 40, Caucasians over 65, individuals with a family history of glaucoma, diabetics, and individuals with severe myopia—be provided visual acuity screening and referred for ophthalmologic examination.

3. VISION PROGRAMS FUNDED BY OTHER SOURCES

Three states, Georgia, Missouri, and Ohio, have vision programs that are made possible by a \$1.00 donation that residents can voluntarily make at the time of obtaining or renewing their driver's license (Georgia and Missouri) or vehicle registration (Georgia, Missouri, and Ohio). The donation in Georgia is earmarked to help people who have vision problems. In Ohio the funds are used to ensure that children have good vision and healthy eyes.

During Georgia's 1999–2000 legislative session, the state legislature enacted this new program that is administered by the Department of Human Resources. Within the Department of Human Resources, the Division of Public Health recently issued 5 requests for proposals for programs and services in education, screening, diagnosis, and treatment of visual impairment. The stakeholder anticipates that awards will be made shortly. During the first year of the program, citizens donated approximately \$500,000.

The Missouri legislature passed a new law to create the Blindness Prevention, Education, Screening, and Treatment Program. The Department of Health administers this program from funds raised from voluntary \$1.00 donations made by applicants for a driver's license or vehicle registration. This program requires the state health department to pay for eye exams for every individual enrolling in kindergarten or first grade, or a Head Start program for whom public and private health insurance does not cover the cost of the examination. This program began January 1, 2001, and these funds will be available for distribution on July 1, 2001. The state estimates that donations will be \$126,667 per year, with 592 children enrolling in the program.

Ohio's program is called Save our Sight (SOS) and, as mentioned above, was created to ensure that children in Ohio have good vision and healthy eyes. The program accomplishes this through the early identification of children with vision programs and the promotion of good eye health and safety. According to the stakeholder, the SOS program has \$1,300,000 in funding. The stakeholder wrote that Ohio is currently planning SOS promotional activities to increase the number of donations, since only about 10 percent of vehicle registrants donate.

SOS funds address the vision needs of the estimated 500,000 children in Ohio who have undetected vision problems. SOS funds are limited to services for children, and are used to provide a variety of services including the development and implementation of an Amblyope Registry. The Ohio Amblyope Registry is a statewide program designed to serve the needs of children with amblyopia, commonly known as lazy eye, their families, and eye doctors. It is a voluntary registration program to increase knowledge about amblyopia, its treatment, and prevention. All services provided by the registry are free of charge and are offered to children up to 18 years old.

Kentucky designated some of its tobacco settlement monies to provide eye exams for children entering school for the first time. The Kids Now Vision Program is a partnership of the Governor's Office of Early Childhood, Kentucky Optometric Association, Kentucky Department of Education, Kentucky Cabinet for Health Services, and the Commission for Children with Special Health Needs. Families whose incomes that are above 200 percent of the poverty level, yet under 250 percent of the poverty level, and who have no other insurance that pays for eye examinations, are eligible for assistance. The stakeholder indicated that the Kids Now Vision Program is funded for \$150,000 per year.

4. VISION EDUCATION AND TRAINING PROGRAMS

Stakeholders in three states described education and/or training programs that are offered to residents. The Illinois Department of Public Health has an agreement with the Illinois Society for the Prevention of Blindness to conduct an "Eye Spy" program. Certified technicians teach 4th grade children about eye health and safety. Through Ohio's Save Our Sight Program, funds have been allocated to train, certify, and equip vision screeners. Funds are also used to provide protective eyewear for youth sports and school activities, and for the development and provision of eye health and safety program in schools. Lastly, the Arizona Department of Health Services teamed with Prevention Blindness of America to provide a training-of-trainers program for school nurses and other screeners to train them in the best vision screening practices.

5. OTHER VISION PROGRAMS

The stakeholder in Wisconsin wrote that the purpose of one of her state's eye health programs was to reduce occupational eye injury, which is being addressed through Occupational Safety and Health Administration (OSHA) consultation and appropriate eye protection in the workplace.

E. ORGANIZATION OF STATE HEALTH DEPARTMENTS

In an effort to better understand where eye health programs are situated, stakeholders were asked to describe how their state health department is organized and where eye health programs are

located. Stakeholders in 21 states and the District of Columbia either identified their state health department (n=18, 46.2%) or provided a copy of their organizational chart (n=4, 10.2%). Stakeholders from 17 states (43.6%) did not respond to this item on the protocol. As described below, the vision programs described in the previous section of this report are located in different bureaus, divisions, and offices in the various states.

Many of the eye programs that stakeholders described are part of their Diabetes Control Program (DCP). Ten states provided information about where their DCP was situated—

Idaho—	Bureau of Health Promotion, Division of Health
Iowa—	Bureau of Health Promotion, Division of Health Programs, Prevention and Addictive Behaviors
Kentucky—	Chronic Disease Prevention and Control Branch, Division of Adult and Child Health
Nebraska—	Division of Chronic Disease Prevention and Control, Preventive and Community Health Services
North Carolina—	Division of Public Health, Department of Health and Human Services
North Dakota—	Division of Health Promotion, Preventive Health Section, Department of Health
Pennsylvania—	Bureau of Chronic Diseases and Injury Prevention, Deputy Secretary for Public Health
Texas—	Bureau of Disease, Injury, and Tobacco Prevention
Utah—	Bureau of Health Promotion, Division of Community and Family Health Services
Wisconsin—	Bureau of Chronic Disease Prevention and Health Promotion

Vision screening programs are housed in various sections, offices, and divisions depending on how the state's health department is organized. For example, Arkansas' Vision Screening Program is housed in the Child and Adolescent Health Section of Statewide Services. In Illinois, vision screening falls within the Division of Health Assessment and Screening Vision and Hearing Programs, which is part of the Office of Health Promotion. Pennsylvania's Bureau of Community Health Systems, School Health Program is responsible for vision screening and provides partial reimbursement for vision screening in all grades.

The Division of Family and Community Health is responsible for Michigan's vision screening program. This division is part of the Department of Community Living, Children, and Families. In New Hampshire, vision screening falls under the purview of the Bureau of Maternal and Child Health. Finally, Ohio's vision programs are situated in the Division of Family and Community Health Services in the Bureau of Child and Family Health Services, Field Services Division.

Wisconsin's eye protection in the workplace program is located in the Department of Health and Family Services, Division of Public Health, Bureau of Occupational Health. Missouri's Blind Education, Screening and Treatment program is located in the Bureau of Genetics and Disabilities Prevention in the Division oaf Maternal and Child Health, Missouri Department of Health.

A list of the 50 state health departments, including address, telephone number (if available) and Web site address is presented in Appendix D.

F. EYE HEALTH PROGRAMS OFFERED BY OTHER STATE LEVEL DEPARTMENTS/AGENCIES

Realizing that eye health programs may exist in other state agencies, staff designed the protocol to query stakeholders whether or not they were aware of programs offered by other state level departments/agencies. Respondents from 29 states and the District of Columbia responded to this item. Twelve stakeholders (40%) mentioned programs in other state agencies, while 18 others (60%) were not aware of any other eye health programs at the state level. Even though some stakeholders knew that other state agencies had eye health programs, the stakeholders did not provide specific details about the programs.

Arkansas—	Arkansas School for the Blind provides support to the school for vision impaired students.
District of Columbia—	Eye health programs may exist within the Public Benefit Corporation, Department of Aging, and Medicare/Medicaid.
Florida—	School Health maintains an eye screening program for pre- kindergarten through 3 rd grade students. Supplemental eye screening, treatment, and follow-up is provided through Vision Quest in pre-kindergarten through grade 3.
Georgia—	The Division of Rehabilitation has eye related programs. This Division was part of the Department of Human Resources and is now being transferred to the Department of Labor.
Illinois—	Eye health programs exist in the Office of Rehabilitation Services, which is part of the Department of Human Services.
Indiana—	The Department of Education is responsible for vision screening in schools.
Kentucky—	The Commission for Children with Special Health Needs provides care for children 0 to 21 whose household incomes peak at up to 200 percent of the poverty level. The Commission provides diagnosis, treatment, and vision correction for children with eye disease or serious refractive errors. The state has also established a program called Kids Now that provides eye exams to children entering school for the first time. It should be noted that the Kids Now Vision Program is a partnership among several different state agencies (including the Cabinet for

Health Services, Department of Education, Office of Early Childhood, Commission for Children with Special Health Care Needs), and the Kentucky Optometric Association.

The Department of Education has implemented a program of mandatory pediatric eye exams for children up to 20 years of age who enter the Kentucky school education system for the first time.

Missouri— The State Department of Social Services, which concentrates on vocational rehabilitation, operates the Missouri Prevention of Blindness program. This program provides eye care for all residents with visual problems. The goal is to prevent blindness through early diagnosis and treatment. Services are provided in clinics throughout the state. The clinics counteract two obstacles to better eye care: inadequate family finances and/or limited medical eye care services in many areas of the state. Anyone may be screened at a clinic, regardless of income. Patients at the clinic may be referred for glasses, sent to a medical center for further diagnosis and treatment, or referred to a local physician for follow-up care.

The program uses contracts with state medical facilities to provide comprehensive eye care to eligible individuals. Persons who experience visual problems are referred to other public and private programs that may be of further assistance in meeting their medical care needs, or in providing other necessary services.

The State Department of Social Services also operates a statewide eye health program that has 3 components: glaucoma screening clinics, full-scale eye screening clinics, and treatment of eye conditions. The screenings are available to all Missourians who qualify based on income, asset, and medical insurance guidelines, plus the documented severity of their eye condition. Typically eligible conditions involve eye trauma, progressive eye disease, malfunction and malformation of the eye, and loss of visual acuity. The program is targeted to those who are poor and underinsured. The program is funded at \$240,000/year and reaches about 10,000 residents.

New Hampshire— A multi-sensory intervention through consultation and education (MICE) program is offered to children aged 0–3 years who are diagnosed with a vision impairment. MICE is provided by New Hampshire's Blindness/Visual Impairment Program.

Other agencies that the stakeholder referenced were the Early Support Services Family Center; Services for the Blind and

	Visually Impaired; and Assistive Services for Education, Technology, and Training.
New Jersey—	Department of Education.
Texas—	The stakeholder referenced the Texas Commission for the Blind.
Utah—	The Department of Education has a school for the blind.

G. EYE HEALTH PROGRAMS OF COUNTY HEALTH DEPARTMENTS

The discussion protocol asked stakeholders whether or not their county health departments had implemented eye health programs. As shown in Table 3, the majority (65.4%) of stakeholders who responded to this item reported that their county health departments did not have eye health programs at the county level.

Implementation of Eye Health Programs	Number of Respondents	Percent
Yes	7	26.9%
No	17	65.4%
Don't know	2	7.7%
Total	26	100%

Table 3: Eye Health Programs of County Health Departments

Stakeholders in Arkansas, Georgia, Illinois, Kentucky, Michigan, New Hampshire, and Ohio described their county health department's eye health programs. For example, the local county health units in Arkansas and Georgia participate in the Early Periodic Screening Diagnosis and Treatment (EPSDT) program.

In Illinois, much of the mandated vision screening is funded through grants totaling \$702,000 that go to the county health departments. The funds are primarily used to pay for vision screenings at preschools and day care centers. Local health departments also sponsor vision clinics through the IDPH program.

Michigan's county health departments are also responsible for administering the preschool and school age vision screening program. The health departments hire vision technicians who receive a 2-week training course from the state, and who screen the children at Head Start programs; child care centers; and at public, private, and charter schools. Vision screenings are also provided free of charge at scheduled open clinics sponsored by the health department.

The local health departments in Kentucky promote eye exams and referrals for persons with diabetes. They also provide routine eye screening and referrals for mandatory eye exams for pediatric patients. New Hampshire has two city health departments that provide eye health services to individuals. One of the services provides vision screenings for children. And, the stakeholder for Ohio wrote that the vision programs offered by the Ohio Department of Health are done in cooperation with local city and county health departments and the school system.

H. EYE HEALTH INFORMATION SHARING

Stakeholders were asked what, if any, eye health information their state health department shared with counties and/or municipalities in their state and, if they did share information, how it was disseminated. Respondents from 15 states reported that eye health information is shared among agencies. In most cases, information is disseminated from the state health department to the local health agencies. Stakeholders' responses are provided below.

- Arkansas— "The Vision Screening Program (VSP) provides each of Arkansas" school districts with a summary report. Those districts with 80 percent or greater follow-up rates receive a Certificate of Commendation from the VSP."
- Florida— "Critical parameters of the Florida Diabetes Medical Practice including an annual eye examination" are shared with local health departments. "Opportunities for free eye screenings through various specialty organizations are forwarded to county health departments and community health centers via e-mail and facsimile."
- Georgia The Georgia Division of Public Health shares vision related information with its 19 health districts. These 19 health districts are responsible for 159 counties in the States. The Division has little to no contact with the actual county health departments.
- Hawaii— "Eye information associated with diabetes is disseminated to Hawaii's 7 regional health departments via e-mail, Web sites, mail, and fax."
- Illinois— The Illinois Department of Public Health "works with the Illinois Society for the Prevention of Blindness and shares brochures and eye health and safety information through the Department's training courses and workshops and consultant services."
- Iowa— The Iowa Department of Public Health "has a Resource Directory [that] lists diabetes" that is shared with county health departments.

Michigan— "All county health departments, under the leadership and assistance of the Michigan Department of Community Health, promulgate and promote information about free and periodic vision testing and screening to all parents of Michigan preschool and school age children."

- Missouri— Brochures, radio, and newspaper media will be used to disseminate information about the Blind Education, Screening and Treatment program funds.
- New Hampshire— "The Preschool Vision Hearing Screening Program (PSVHSP) provides all screening results of the children screened to the school nurse in [the child's] community."

New Jersey—	"The New Jersey Department of Health and Senior Services shares printed material on the importance of dilated eye exams with county health departments. The New Jersey Commission for the Blind sends out announcements on free vision screenings to local hospitals and community health centers."
New York—	The stakeholder shares NEI materials on glaucoma, low vision, and diabetes with the county health departments.
North Carolina—	The North Carolina Division of Public Health "distributes the National Eye Health Education Program's pharmacist information kit, diabetic retinopathy kit, and the glaucoma kit to statewide partners."
North Dakota—	"The eye health information the North Dakota Department of Health shares deals specifically with diabetes. The Diabetes Control Program is investigating partnerships with the North Dakota Optometric Association."
Ohio—	"The Ohio Department of Health shares screening health policy and school screening data via a biennial report. They provide public health education materials upon request. In addition, information can be disseminated via their Department Web site and the public health television program (PH 1)."
Utah—	The Utah Diabetes Control Program "develops local district health profiles for persons with diabetes. These profiles are sent to the local health departments when updated."
Wyoming—	The Wyoming Community and Family Health Division shares information from CDC about the diabetes education program.

I. ASSISTANCE THAT THE NATIONAL EYE INSTITUTE CAN PROVIDE TO THE STATES

Another goal of this project was to identify some ways that the National Eye Institute, through its National Eye Health Education Program, could assist states. Toward this end, the protocol included an item asking stakeholders to identify how the NEI could better assist their state health department's eye health related services. More than half (n=22, 56.4%) of the stakeholders offered a comment about how NEI could assist them. Two stakeholders (5.1%) said they did not know what NEI could do for them. Stakeholders from 15 states (38.5%) did not offer any comment. As shown in the box below, the majority of responses were requests for information, materials, and technical assistance. Other stakeholders hoped that NEI would provide funding.

The verbatim comments that stakeholders wrote are listed below:

Alabama: "Provide funding."

Arkansas: "Provide public awareness materials."

Colorado: "I don't know."

District of Columbia: "Develop better data collection systems/processes for assessing visual impairment/blindness at a population level. Current hospital discharge and BRFSS data is inadequate."

Delaware: "Educational materials." Another person wrote, "set up funding for vision screening at the pre-school level."

Florida: "Most of the clients served by the county health departments are indigent and cannot financially afford the cost of specialized care. It would be helpful if various state agencies (i.e., state Diabetes Control Programs; state of Florida agencies that maintain eye health programs) are joined on a list serve and notified of various free screening opportunities for indigent patients."

Georgia: "To learn what NEI currently does and what they are planning to do. Executive summary about the services NEI provides would be helpful. Also, any literature in another language."

Hawaii: "Information on new initiatives and funding available for developing (an) Eye Health Program."

Idaho: "Ideas for integrating eye health into currently existing programs. Ideas for population based eye health strategies and programs."

Illinois: "Don't know."

Iowa: "Materials that we can disseminate to local programs or information (we can) order. We will distribute this information through our network. We do hope to do some promotion about eye health and diabetes during November."

Kentucky: "Resource directory." They would be able to put a resource directory on the KY Cares Web site.

Michigan: "By keeping the state abreast of relevant research, trends, and practices of vision screening service from around the nation."

Missouri: "Provide information and education services for states on what programs are available for the blind."

- Nebraska: "Publish the results of this survey, with copies to each state's chief health officer and Governor."
- New Hampshire: "Provide information on best practices and recommendations for screenings for children."
- North Carolina: "Any useful provider and patient educational materials or tools would be helpful related to diabetes."

New Jersey: "Web site screening very helpful as well as patient education materials."

New York: "Federal funding for a grant program for state or local level."

- Ohio: "My personal opinion is by influencing government policy in relevant agencies, i.e., Maternal and Child Health Bureau, Medicaid. Medicaid for instance has not made policy of system wide use of polycarbonate lenses for children; Medicaid has stopped collecting medical provider compliance data for vision assessment."
- Rhode Island: "(As we develop our new vision screening program,) it would be extremely beneficial for the development of our program if you could share with us the information you have received from other states. It might give us the framework we need. Any other assistance you can provide to us would be greatly appreciated!"
- Utah: "Provide resources for patients who are underserved or uninsured to get eye exams. Provide training materials for primary care providers who serve patients in underserved areas or those who are low income."
- Washington: "There first needs to be a recognition that there needs to be a program to address this [eye related health services]. Without a home for the program it will get no attention."
- Wisconsin: "Provide materials in additional languages and culturally appropriate for minority populations."
- Wyoming: "I doubt that Wyoming will have a separate emphasis on an eye program. Your information to us would have to be couched in a fashion to encourage emphasis on vision in Medicaid, EPSDT, MCH, CSHCN, CDC prevention programs, general news releases on eye issues, etc."

J. STATE CONTACTS

The protocol informed stakeholders that members of the Healthy Vision Coalition might be interested in contacting someone from their state to seek assistance in promoting HP 2010 objectives. Stakeholders were asked to provide contact names and mailing and/or e-mail addresses, and 24 stakeholders responded.

The last item on the discussion protocol asked stakeholders to provide a contact name and mailing address if they were interested in receiving vision related publications from NEI. Twenty-three stakeholders responded to this item. A complete list of stakeholders, Healthy People 2010 contacts, and the names and addresses to where NEI publications should be sent, can be found in Appendix E.

IV. Summary and Recommendations

A. SUMMARY

Three goals were identified for this project-

Gather data on each state's vision position Gather information about each state's vision programs Identify ways in which NEI can assist states.

In February and March 2001, ORC Macro identified 51 stakeholders and e-mailed them a discussion protocol that was approved by the National Eye Institute. Stakeholders from 38 states and the District of Columbia (76.5%) responded to our request for information about their State Health Departments' eye health policy and programmatic efforts. ORC Macro carefully reviewed their responses and analyzed them using an SPSS database that generated frequency counts. ORC Macro also analyzed the open-ended responses using content analysis to identify patterns and themes.

Some of the key findings that emerged from the analysis—

Twenty-one states reported their health department has goals, objectives, and/or state laws related to eye health.

• Most of the goals and objectives related to diabetes and vision screening. The most common goal was to increase the percentage of persons with diabetes who received dilated eye exams.

Many states appear to be familiar with Healthy People 2010 vision objectives. Nineteen of the 22 states that responded to this item reported that they use the Healthy People framework to guide their health policies and practices related to eye health. Four states—Kansas, Kentucky, North Carolina, and West Virginia—specifically mentioned that they had or were in the process of developing their own state Healthy People objectives.

Thirteen states and the District of Columbia reported that they anticipate that HP 2010 vision objectives will guide their state's future eye health programs and policies.

Of the 38 states and the District of Columbia, 59 percent (n=23) reported having an eye health program in their department of health. The majority of these programs were diabetes related or vision screening for preschool and school age children.

- Three states—Georgia, Missouri, and Ohio—have or are in the process of developing eye health programs that are funded by \$1.00 donations from citizens when they obtain or renew their driver's license and/or register their motor vehicle. To date, Ohio has developed the most comprehensive program.
- Two states—Illinois and Arizona—have partnered with other organizations to provide eye health related education and training programs.
- Kentucky is using money it received from the tobacco settlement to provide eye exams for children entering school for the first time.

None of the states that responded to the discussion items indicated that their state health department's organizational chart included a separate office/division/bureau for eye health. Stakeholders who responded to the protocol indicated that diabetes eye health is most often found in their state's diabetes control program. There was no uniform division that vision screening was located. In fact, in some states the Department of Education is responsible for their state's vision screening programs.

- Only 12 stakeholders (40% of those who responded) identified other state departments/agencies that offered eye health programs. Other agencies that have programs included the Department of Education, Department of Social Services, and the Rehabilitation Services.
- The majority of stakeholders who responded to this item (n =17, 65.4%) said their county health departments do not have eye health programs. Only stakeholders in Arkansas, Georgia, Illinois, Kentucky, Michigan, and New Hampshire knew about vision programs at the county level. The majority of the county programs focus on vision screening.
- Eye health information is being disseminated from the state level to counties and/or municipalities in 15 states. For example, some state health departments provide printed material on the importance of dilated eye exams and information on diabetes. A few states provide statistical information including screening data to their county health departments. The stakeholder from New York shares NEI materials on glaucoma, low vision, and diabetes with country health departments.
- Stakeholders were eager to share their suggestions about how NEI, through its National Eye Health Education Program, could assist them. The majority of stakeholders requested information and materials. Some wanted more information about NEI, others were interested in the latest research and trends, and still others wanted materials they could disseminate to other organizations/agencies and/or the public. Other stakeholders hoped that the NEI could provide funding for eye health programs. One state, Idaho, was interested in ideas how to integrate eye health into their existing programs. Two states, Georgia and Wisconsin, requested literature in other languages. Two other states, Nebraska and Rhode Island, requested that NEI make this report available to the states.

Most stakeholders who responded to the protocol provided the name and address of an individual that the Healthy Vision Coalition could contact when seeking states' assistance in

the promotion of HP 2010, and the name and address of someone in the health department who would be interested in receiving vision related publications from NEI.

B. RECOMMENDATIONS

ORC Macro has assessed the current status of vision related policy and programmatic efforts of State Health Departments, and has developed 5 recommendations about how NEI may help these agencies meet their vision objectives and deliver effective eye health programs.

1. CONTINUE DATA COLLECTION

While ORC Macro undertook an intensive search for states' eye health stakeholders and information concerning eye health policy and programs, ORC Macro found it particularly challenging in several states to identify a stakeholder in eye health. In order to obtain the most complete information possible, NEI may consider further data collection, especially in key states that have been identified where information could not be easily gathered, yet is known to exist.

2. IDENTIFY AN NEI STATE LIAISON

ORC Macro has identified enough gaps in vision policies and programs for the NEI to consider designating a staff person who would serve as a liaison to the states. This individual would become knowledgeable about the state of the government-funded vision programs across the country. The primary gaps concern eye diseases other than those that are diabetes-related, and vision programs other than screening for children. While these are issues of vital importance, NEI provides a wealth of information about many other aspects of vision health. The liaison could be a point of contact for state health officials about these programs.

The NEI State Liaison would be able to continue to gather information about vision policy/programs, coordinate with state stakeholders, and provide information to stakeholders such as brochures (in English and Spanish) or campaign materials on vision health and eye disease. The Liaison would also be in a position to identify those states with programs that would be useful models to other states, and could link state eye health programs through a best practices model.

3. KNOWLEDGE EXCHANGE NETWORK

Many of the states from which ORC Macro gathered information have instituted vision policies/programs that other states could use. The NEI could develop a knowledge exchange network, or a central database of programmatic information, from which state vision stakeholders could download information about particular aspects of other states' vision-related policies/programs and activities. This information would prove invaluable to states seeking to improve upon existing programs or initiate new programs, since several states have identified a need for this information.

4. PROVIDE HP 2010 GUIDANCE AND BROADEN DISSEMINATION EFFORTS

While most state health officials appear to be familiar with Healthy People 2010 vision objectives, others are not. NEI could provide information to all states pertaining to HP 2010 including how to set objectives, and how to promote the HP 2010 toolkit and the Healthy Vision Web site. The Healthy Vision Web site could have a delineated state page where a user could click on a link and either view information about a particular state's programs, or could link directly with a particular state's eye health Web site.

Since many stakeholders said their county health departments do not have eye health programs, the NEI State Liaison could work with stakeholders to engage county/local health officials in integrating eye health into their existing programs.

5. HIGHLIGHT STATE ACTIVITY THROUGH MEDIA OUTLETS

The NEI could further highlight state vision programs by running features on specific programs in the *Outlook* newsletter and the NEI Web site. Examples might include—

- The Utah Department of Health's initiative to work with seven health plans to implement an incentive program (provide a free 60-minute telephone calling card) to plan members who receive an eye examination within the calendar year.
- Ohio's "Save Our Sight" program for vision screening of children.
- Missouri's program in which citizens can make a \$1.00 donation to fund vision programs when they renew their license or vehicle registration.
- Kentucky's use of tobacco settlement monies to provide eye exams for children entering school for the first time.

The features could include interviews with key players in the efforts, descriptions of the programs, and information from the National Eye Institute.