Public Health Task Force
2006

North Carolina Public Health Improvement Plan

Final Report
October 2006

North Carolina
Public Health

Promoting and
Protecting
the Health of
North Carolinians.

North Carolina Public Health

Strengthening public health infrastructure is important.
Either we are all protected or we are all at risk.

The Public Health Foundation

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PUBLIC HEALTH TASK FORCE 2006

North Carolina Public Health Improvement Plan
Final Report

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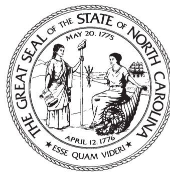

North Carolina Department of Health and Human Services
2001 Mail Service Center • Raleigh, North Carolina 27699-2001
Tel 919-733-4534 • Fax 919-715-4645 •
Michael F. Easley, Governor Carmen Hooker Odom, Secretary

September 27, 2006

It is with great pleasure and pride that I commend to you this Final Report of the Public Health Task Force 2006. The recommendations in this report are the foundation of the North Carolina Public Health Improvement Plan. They provide strategic guidance for our continuing efforts to improve the health of North Carolinians everywhere through increased capacity in core public health infrastructure and services.

Three years ago we created the Public Health Task Force 2004 using Senate Bill 672, Strengthen Public Health Infrastructure, as the foundation for the work of the Task Force. I charged the Task Force with developing recommendations on how to strengthen North Carolina's public health system, improve health status for North Carolinians and eliminate health disparities. With the generous support of the North Carolina General Assembly and a coordinated effort from our public health system, significant progress has been made. These accomplishments are outlined in the beginning of this 2006 report.

Important challenges and needs remain, however, and to address these issues we reconvened the Public Health Task Force 2006 and charged them with reviewing progress made on the original recommendations, documenting remaining needs, and drafting revised recommendations. The 2006 Task Force has been at work since January of this year, held two regional forums, heard testimony, and reviewed research and lessons from the field during the course of their work. Each of the six committees – Accreditation, Accountability, Workforce Development, Structure & Organization, Planning & Outcomes and Finance – has developed targeted recommendations that address critical needs. I encourage readers of this 2006 report to give thoughtful consideration to its content as it will inform future efforts in this area.

In spite of the new resources for our public health infrastructure that became available as a result of terrorist attacks on our country, and significant support from the North Carolina General Assembly over the past three years, North Carolina's public health infrastructure remains critically underdeveloped in a number of important areas. This 2006 report will help us make difficult decisions, regarding the allocation of scarce resources. I am confident that the proper foundation for this work has been created with this report. I congratulate the members of the Task Force for their hard work and commitment to improve the public's health in North Carolina.

Sincerely,

Carmen Hooker Odom

North Carolina Department of Health and Human Services

Division of Public Health

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Michael F. Easley, Governor
Carmen Hooker Odom, Secretary

Leah Devlin, DDS, MPH
State Health Director

November 1, 2006

As North Carolina's State Health Director, I want to acknowledge the work and planning that has gone into the development of the Final Report of the Public Health Task Force 2006. This document is the foundation of a comprehensive public health improvement plan that will guide our efforts in strengthen North Carolina's public health system, improve health status and eliminate health disparities. I am grateful for the leadership of Secretary Carmen Hooker Odom, whose vision created the original Public Health Task Force 2004, and the dedicated work of the task force, task force committees, and state and local public health staff whose wisdom and experience informed these recommendations.

The Public Health Task Force 2006 was charged with reviewing the original recommendations of the 2004 task force, documenting progress, identifying remaining or critical emerging needs, and developing revised recommendations. These revised recommendations represent deliberation, research, discussion and debate. Each of the six working committees was faced with developing consensus around critically important issues facing public health in North Carolina. Their process was deliberative, open and informed by current research, best practice and practical experience both at the state and local level. I am proud to commend their work to you.

Significant progress has been made on a number of recommendations since the 2004 Task Force Final Report was issued (January 2005). Much credit should be given to the North Carolina General Assembly for their generous support in the areas of critical public health concerns. This report includes a summary of the accomplishments we've achieved together. These achievements represent an important milestone in our efforts to improve North Carolina's public health system. These new, revised recommendations are a foundation upon which we can continue to develop creative and effective strategies for supporting public health work in our state. I hope you will continue to be involved in this process as we move forward.

I want to extend a special thank you to the Task Force staff from the Division of Public Health and the North Carolina Institute for Public Health at the University of North Carolina at Chapel Hill. Without their support, this work would not have been possible.

Sincerely,

Leah M. Devlin, DDS, MPH
State Health Director

North Carolina Public Health
Working for a healthier and safer North Carolina
Everywhere. Everyday. Everybody.

Location: *5605 Six Forks Rd. • Raleigh, N.C. 27609-3811*

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Introduction

Since the final report of the Public Health Task Force 2004 was issued (North Carolina's Public Health Improvement Plan, January 2005), and with the generous assistance of the North Carolina General Assembly, progress has been made in strengthening North Carolina's governmental public health system. This system continues to respond to new and serious public health emergencies, significant changes in population, unacceptable health disparities, decreasing funding and significant variations in public health protection between counties and regions. As a result, North Carolina's State Health Director has reconvened the Public Health Task Force 2006. The charge to the task force is:

- Review and document progress made on the 2004 recommendations;
- Identify remaining resource needs and any critical emerging needs; and
- Draft a revised set of recommendations.

"Strengthening public health infrastructure is important. Either we are all protected or we are all at risk."
The Public Health Foundation

An increased, and ongoing, reinvestment in the state's public health infrastructure remains critical to providing the essential public health services that will assure public health protection for all North Carolinians. Recent terrorist events, along with outbreaks of new and often fatal infectious diseases, have been a wakeup call to North Carolina. The state's governmental public health system must be continually strengthened in order to promote and protect the public's health. New federal resources for bioterrorism preparedness that have created some additional capacity to detect and respond to certain public health emergencies – these resources, while necessary, are not sufficient.

The state's role in supporting these national preparedness efforts is to continue to reinvest in the core public health infrastructure. A new infusion of support will enable the system to respond to all public health emergencies and threats to the health and prosperity of all North Carolinians. Recent reinvestments of resources in the state and local public health system by the North Carolina General Assembly have coincided with increases in public health accountability. Further development of these new systems of accountability, accreditation, and data collection will provide the tools necessary to measure success and allow the state to invest with confidence.

The re-convened Public Health Task Force 2006 has considered the original set of recommendations, reviewed progress made, and noted remaining resource needs. Their updated recommendations follow, and are divided into two parts:

1. Core Infrastructure – Recommendations addressing critical structural and system component deficits; and
2. Core Service Gaps - Recommendations addressing crucial deficiencies in priority public health services and programs.

Introduction

The Mission of North Carolina Public Health

To promote and contribute to the highest possible level of health for the people of North Carolina.

THREE PUBLIC HEALTH CORE FUNCTIONS AND 10 ESSENTIAL SERVICES

I. Assessment

1. Monitor health status to identify and solve community health problems (e.g., community health profiles, vital statistics and health status).
2. Diagnose and investigate health problems and health hazards in the community (e.g., epidemiologic surveillance systems, laboratory support).

II. Policy Development

3. Inform, educate, and empower people about health issues (e.g., health promotion and social marketing).
4. Mobilize community partnerships and action to identify and solve health problems (e.g., convening and facilitating community groups to promote health).
5. Develop policies and plans that support individual and community health efforts (e.g., leadership development and health system planning).

III. Assurance

6. Enforce laws and regulations that protect health and ensure safety (e.g., environmental health rules).
7. Link people to needed personal health services and ensure the provision of health care when otherwise unavailable (e.g., services that increase access to health care).
8. Assure competent public and personal health care workforce (e.g., education and training for health care providers).
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services (e.g., continuous evaluation of public health programs).
10. Research for new insights and innovative solutions to health problems (e.g., links with academic institutions and capacity for epidemiologic and economic analyses).

Accomplishments: Core Infrastructure

Accreditation

- A mandatory system of accreditation for local/district health departments has been established with the passage of legislation and the subsequent adoption of rules by the Commission for Health Services.
- Current legislation provides $700,000 per year in recurring funds for the accreditation process. Local health departments in North Carolina will receive one-time funding in the year that they seek initial accreditation.

Accountability

- An Office of Performance Improvement and Accountability has been established within the North Carolina Division of Public Health that is implementing a formal reporting and accountability process for state and local public health agencies.
- The Division of Environmental Health is working with the Division of Public Health to identify and incorporate appropriate measures of environmental health into the formal reporting and accountability process for state and local public health agencies.
- A set of Best Practice Indicators has been established that will provide county-specific data about the effectiveness of public health efforts to promote population health.

Structure & Organization

- The North Carolina General Assembly has budgeted $1,000,000 in recurring funds to establish and support public health incubators. A total of six public health incubators have been established and the Incubator Advisory Board supports a shared project.
- The State Health Director and the Director of the Division of Environmental Health are now meeting on a monthly basis and the Secretaries of the departments now meet on a quarterly basis to ensure better coordination. The Memorandum of Understanding (MOU) between the departments has been updated and revised, and now includes a detailed work plan.
- The State Health Director now reports directly to the Deputy Secretary of the Department of Health and Human Services and meets weekly with the Secretary of the Department.
- A State Health Department Accreditation Team has been established. The team has developed an accreditation tool using the National Public Health Performance Standards. The State Health Department (the N.C. divisions of Public Health and Environmental Health) will perform a self-assessment utilizing this tool and an external accrediting body will perform a site visit as part of the accreditation process. The state self-

Accomplishments: Core Infrastructure

assessment will occur between September 1, 2006 and November 30, 2006, with the site visit occurring in January 2007.

- The accreditation process for local health departments is used to promote collaboration among local health departments and any related voluntary structural changes at the local and state levels.

Workforce Development

- The Public Health Workforce Development system's assessment of local public health workers was completed and published in 2004.
- Two non-degree training and education efforts at the North Carolina Institute for Public Health - the Lifelong Learning Initiative and the Public Health Academy - will enable public health professionals to locate and access needed training and development resources.

Planning & Outcomes

- The North Carolina General Assembly (NCGA) appropriated $400,000 non-recurring funds for local Healthy Carolinians capacity.
- The NCGA appropriated 1.0 FTE and $100,000 in recurring funds to support the Office of Healthy Carolinians.
- The Office of Healthy Carolinians/Health Education was awarded a 2-year Prevention Specialist position from the Centers for Disease Control and Prevention (CDC).

Finance

- A one-year cap on the local share of the state's Medicaid match was put into place in 2006.
- Local health departments received $545,419 in FY '06 to increase access to preventative and primary care services for uninsured or medically indigent patients.
- The N.C. General Assembly approved funding of $101,000,000 for a new state laboratory to be built in Raleigh.

Accomplishments: Core Service Gaps

School Nurse Services

- The School Nurse Funding Initiative (SNFI) provided by the General Assembly in HB 1414 on July 18, 2004 provided 80 permanent and 65 two-year school nurse positions. This initiative improved the nurse to student ratio from 1:1,897 in the 2003-04 school year to 1:1593 in 2004-05.
- All Local Educational Agencies (LEAs) in the state now have at least two school nurse positions. Twenty-one LEAs now meet the recommended 1:750 ratio in 2004-05, compared to 10 LEAs that met the recommendation prior to SNFI implementation.

HIV/AIDS Drug Assistance Program (ADAP)

- There has been an increase of $1,000,000 in state appropriations for ADAP in SFY 2006.
- Close to 1,000 PLWHA in NC were served through the Special Presidential ADAP Initiative between October 2004 and December 2005. All individuals still eligible at that time were transitioned into the State.

Eliminating Health Disparities: Title VI Compliance

- The North Carolina General Assembly appropriated recurring funds for a program aimed at creating new full-time positions for interpreter services at the local health departments to enhance their capacity to serve Limited English Proficiency (LEP) clients. With the allocated funding, 11 health departments were funded through the NCOMHHD (N.C. Office of Minority Health and Health Disparities) for a 3-year period beginning FY05/06.

Eliminating Health Disparities: Community Grants

- The Office of Minority Health received $2,000,000 in recurring funds for community-focused initiatives targeting the elimination of health disparities.

Tobacco Tax

- As of September 1, 2005, the General Assembly raised the tobacco tax from 5 cents/pack (50th in the nation) to 30 cents/pack (45th in the nation). An additional 5 cents/pack increase on July 1, 2006 brought the total cigarette tax to 35 cents/pack.
- As of September 1, 2005, the excise tax on “spit” tobacco products in N.C. also increased from 2% to 3% of the actual cost.

Accomplishments: Core Service Gaps

Immunizations/Universal Vaccine Program

- The North Carolina General Assembly increased state support for the universal vaccine program by appropriating $5,526,095 to support the provision of influenza and Tdap vaccines.
- The North Carolina Immunization Registry (NCIR) was implemented in all 100 local health departments between June and September 2005. Hands-on training and technical assistance were provided at every local health department to ensure use of the NCIR as a clinical tool. As of the summer of 2006, 200 private providers were using the NCIR.

Environmental Health

- The regulation of private wells has been added as a mandated program, effective July 1, 2008.

Early Intervention

- The General Assembly has responded to increased need in this area with additional appropriations in both 2005-2006 and 2006-2007. For 2005-2006, $5,000,000 in new appropriations was provided for services through appropriately qualified community-based providers.
- For 2006-2007, $7,061,108 is being provided that includes 141 positions and permission for 56 receipt-supported positions.

Automation: Public Health Information Network

- The North Carolina Immunization Registry (NCIR) was implemented in 2005.
- The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) went into production in 2005.
- The North Carolina Hospital Emergency Surveillance System (NCHESS) was implemented in 2005.
- Based on funding provided by local health departments, implementation for the new Health Information System (HIS) began in 2006 with an anticipated statewide rollout by fall 2007.
- The National Electronic Disease Surveillance System (NEDSS) began implementation in 2006.

Executive Summary: Core Infrastructure Recommendations

Accreditation Committee

1. Fund local health departments on an ongoing basis for accreditation and related continuous quality improvement activities.
   Resources Needed: $750,000 in FY '08 (see full schedule) for local support of essential services.
2. Fund the accreditation process to cover the additional costs of reaccrediting agencies beginning in 2008.
   Resources Needed: $ 54,000 in additional funding for FY '08 (see full schedule) for accreditation administrator.

Accountability Committee

3. Create a Community Wellness Index that will assess state and county-specific health status – a state and county health report card.
4. Implement a Performance Improvement and Accountability process that will use accountability data to support and evaluate the effectiveness of state/local efforts to improve the health of the residents of N.C.
5. Compile a set of the State Public Health Performance Indicators that funders and other stakeholders use to hold DPH accountable.
   Resources Needed: $243,000

Structure & Organization Committee

6. The current balance of responsibility and authority between state and local government over the organization and structure of the local public health delivery system, as set out in North Carolina General Statutes, should be sustained.
7. Fund and create public health incubators for all North Carolina counties to support voluntary and locally driven regional collaboration and economies of scale.
   Resources Needed: $2,000,000 annually
8. Establish a Local Health Department Voluntary Consolidation Incentive Fund in the Division of Public Health with initial funding of $250,000 for use by the State Health Director.
   Resources Needed: $250,000 annually

Workforce Development Committee

Executive Summary: Core Infrastructure Recommendations

9. The pay and compensation requirements of the Public Health workforce should be fully funded so that:
   - Staff in critical and difficult to retain positions are not lost;
   - Hiring managers are able to compete in recruiting for the best qualified employees;
   - Hiring managers are able to compete in recruiting a diversified Public Health workforce;
   - Current and future public health services to citizens are not negatively impacted by staffing shortages;
   - A workable, functioning career progression ladder is achieved; and
   - Equity funding is budgeted to address historic pay inequities.

   Resources Needed: $2,000,000

10. An assessment of the needs of the North Carolina public health workforce should be conducted that includes:
    - A short-term workforce assessment study; and
    - The identification and dissemination of core public health competencies.

    Resources Needed: $168,000

11. North Carolina should commit to achieving an adequately trained public health workforce by:
    - Developing and implementing an outreach and recruitment marketing plan to ensure an adequate, capable, culturally competent and diverse public health workforce;
    - Fully funding necessary maintenance and operational needs of the Public Health Training & Information Network (PHTIN);
    - Creating public health internships at the state and local level;
    - Creating public health scholarships and loan repayment programs; and
    - Requiring training for Board of Health members.

    Resources Needed: $ 1,179,150

Executive Summary: Core Infrastructure Recommendations

Planning & Outcomes Committee

12. Improve the data and epidemiology to guide state and local decision-making and allocation of resources.
    - Establish a common set of core health indicators.
    - Build capacity to conduct the Behavioral Risk Factor Surveillance Survey (BRFSS) and Child Health Assessment Monitoring Program (CHAMP) to provide county specific or multi-county data.
    - Enhance the opportunities to collect and report county specific or multi-county behavioral and physical health information on children. Specific examples include greater local school system participation in the Youth Risk Behavior Survey and physical health indicator data surrounding the childhood obesity problem in North Carolina.
    - Identify and analyze existing state and local public health problems, health health disparities, and potential threats.
    - Identify the best scientific and evidence-based strategies to address identified public health problems at the local level.
    - Provide epidemiology training for local partners.

    Resources Needed: $1,050,000 annually

13. Fund local health departments to assess and document community health needs and provide critical information and resources for state and local health planning.
    - Establish a uniform statewide process for community health assessment to be conducted on a four-year cycle.
    - Support for the State Center for Health Statistics to provide county specific health data.
    - Build capacity of the Office of Healthy Carolinians.
    - Establish annual integrated planning cycle.
    - Establish ongoing funding support for Healthy Carolinians partnerships.

    Resources Needed: $2,885,000 for Community Health Assessment and $2,000,000 for Healthy Carolinians annually

14. Fund increased information technology capacity at the local level to collect, compile, analyze, and report essential public health data.
    - Build local capacity to collect, analyze and report critical public health data electronically.
    - Assure compliance with relevant data standards of

confidentiality, security, accessibility, and availability – Public Health Information Network (PHIN).
- Build the IT interface between state and local public health and key community partners – hospitals, healthcare providers, emergency management, and others.

Resources Needed: $5,160,000 ($60,000 per LHD) annually

Finance Committee

15. Increase non-categorical General Aid to County funds to improve the delivery of the ten essential public health services in all counties and to include an emphasis on low wealth and economically distressed counties.
Resources Needed: $25,000,000 annually

16. Support legislation to create a new permanent funding source for the Universal Vaccine Program.

17. Authorize local health departments to charge fees for food and lodging program activities at the local level to help cover operational costs.

18. Assure that a mechanism is developed that allows LHD and CDSA Medicaid rates to be updated annually to more accurately reflect the cost of providing services in these settings.
Resources Needed: $18,340,046

19. The state should permanently fund the county Medicaid share and direct that an appropriate portion of freed-up county revenue be appropriated for local infrastructure and service needs. The task force recommends that a significant portion of these revenues be used to target health and human service needs.

20. Secure state funding to continue the development of the Health Information System (HIS) as a partnership with local health departments.
Resources Needed: $10,000,000 (state); $ 5,000,000 (local)

Executive Summary: Core Service Gap Recommendations

21. Re-convene and charge the public health study commission to assess the broad issues of funding Public Health in North Carolina, including:
    - Conducting an analysis of the funding of public health at all levels of government within N.C. (state and local responsibilities). The study should determine "who should pay for public health" and include an assessment of how other states support public health.
    - Documenting the "real costs" of under funding public health by identifying decreased health outcomes and health promotion/disease prevention activities curtailed or not offered as a result of under-funding.

Budget Summary

Budget Summary

Item	Amount
• School Nurse Services	$13,000,000 (2007 – 2008)*
• HIV/AIDS Prevention & Control	$3,341,656
• HIV/AIDS Drug Assistance Program (ADAP)	No new funding requested.
• Eliminating Health Disparities: Title VI Compliance	$4,815,000
• Eliminating Health Disparities: Community Grants	$3,055,000
• Chronic Disease Prevention	$8,099,200
• Injury Prevention & Control	$970,000
• Immunizations/Universal Vaccine Program	$35,900,569
• Environmental Health	$5,428,111
• Early Intervention	$10,600,000

* First year (2007 – 2008) of Five- (or Ten-) Year Plan (see following section)

Part I: Core Infrastructure Recommendations

Accreditation Committee

1. Fund local health departments on an ongoing basis for accreditation and related continuous quality improvement activities.

Needs Addressed/Rationale

The goal of Accreditation of Local Health Departments is to:

- Demonstrate core capacity to respond to public health challenges in local communities;
- Assure all citizens of North Carolina access to a standard of quality in core functions and essential services of public health;
- Improve efficiency and effectiveness of public health services as well as health outcomes across the state;
- Increase accountability for newly emerging diseases; and
- Recognize that access to an agreed-upon minimum standard of quality in delivery of core functions is essential to public health services.

Infrastructure/Capacity Improvement

The accreditation system put into place by our General Assembly is already making a difference at the local level. The ability to present themselves to other health care facilities is opening doors to new partnerships within communities. It allows accredited departments to apply for some grant funds that are restricted to agencies that are accredited. In addition, it is leading to a better understanding of how all employees contribute to the accomplishment of the essential services of public health, greater understanding and commitment by Boards of Health and County Commissioners regarding their role in improving the public's health, and teambuilding within the agencies resulting in more efficient services to clients. Perhaps most important, it is enhancing the credibility and the perception of local health departments in our state. One local health director shared that a pediatrician in private practice in her community contacted her to say how impressed he was that the health department was accredited and how different that health department was from those in the state from which he came.

Budget*

FY'08: Need an additional $750,000 in on-going funding for 30 accredited local health departments.
FY'09: Need an additional recurring $250,000 ongoing funding for 10 additional accredited health departments.
FY'10: Need an additional recurring $250,000 in ongoing funding for 10 additional accredited health departments.
FY'11: Need an additional recurring $250,000 in ongoing funding for 10 additional accredited health departments.

Part I: Core Infrastructure Recommendations

FY'12: Need an additional recurring $250,000 in ongoing funding for 10 additional accredited health departments.
FY'13: Need an additional recurring $250,000 in ongoing funding for 10 additional accredited health departments.

* All figures assume that previous funding is recurring and these are only additional funds (not total funding) needed per year.

Accreditation Committee

2. Fund the accreditation process to cover the additional costs of re-accrediting agencies beginning in 2008.

Needs Addressed/Rationale
See Recommendation #1 above.

Budget*
FY'08: $54,000 for the additional costs of re-accrediting 6 local health departments.
FY'09: No new funds requested.
FY'10: $124,000 for the additional costs of re-accreditation of 10 local health departments.
FY'11: No new funds requested.
FY'12: $55,000 for additional costs for re-accreditation.
FY'13: No new funds requested.
FY'14: Need an additional recurring $33,500 for additional reaccreditation costs, as it is anticipated that all local health departments will be initially accredited and seeking re-accreditation at this point.

* All figures assume that previous funding is recurring and these are only additional funds (not total funding) needed per year.

Part I: Core Infrastructure Recommendations

Accountability Committee

3. Create a Community Wellness Index that will assess state and county-specific health status – a state and county health report card.

Needs Addressed/Rationale

The Office of Performance Improvement and Accountability will work on creating the Community Wellness Index for county/state-specific health status. The Community Wellness Index will take into account how the county is meeting the benchmarks set for the Community Wellness Indicators.

4. Implement a Performance Improvement and Accountability process that will use accountability data to support and evaluate the effectiveness of state/local efforts to improve the health of the residents of N.C.

Needs Addressed/Rationale

Once the finalized version of the Best Practice Indicators and benchmarks are established and adopted by the NCALHD through the Policy and Planning Committee, the Performance Improvement and Accountability process will be implemented.

5. Compile a set of the State Public Health Performance Measures that funders and other stakeholders use to hold DPH accountable.

Needs Addressed/Rationale

Before the Performance Indicators for the state can be compiled, the State Health Department needs to complete an Agency Self-Assessment and pilot accreditation process similar to the local health departments' process. The site visit will occur in January-February 2007. Once the accreditation is completed, Performance Indicators will be identified, benchmarks established, and a Community Wellness Index calculated.

Budget (Recommendations 3-5)

- $243,000

FTEs - 2 state

Part I: Core Infrastructure Recommendations

Structure & Organization Committee

Guiding Principle

Collaboration, partnership and voluntary organizational change, rather than mandated consolidation of local health departments, are inherent in all task force recommendations.

6. In order to protect the citizens of North Carolina in an age of bioterrorism and emerging infections, the current structure of the state and local public health delivery system, as set out in North Carolina General Statutes, should be sustained.

Needs Addressed/Rationale

The current environment of heightened concerns about bioterrorism and emerging infections such as SARS and Pandemic Flu has prompted feedback from the national level that a state-run and administered Public Health system would provide better protection of the public. Consequently, the existing structure in North Carolinaaccomplishes this federal goal while maintaining local flexibility.

No new funding requested.

7. Fund and create public health incubators for all North Carolina counties to support voluntary and locally driven regional collaboration and economies of scale.

Needs Addressed/Rationale

Implementation of this recommendation will result in the addition and continuation of regional voluntary partnerships to enable local public health agencies to cooperate on service delivery, management, organization, preparedness and special projects. It is expected that these public health incubators will require funds to support regional project priorities and staff that can work to establish and carry out program activities and fundraising efforts that will leverage state funds appropriated to public health incubators.

Infrastructure/Capacity Improvement
As the work of these regions continues and the North Carolina Public Health Incubator Collaboratives (NC-PHIC) increase in size and complexity, we recognize the need for increased funding to create and sustain regional efforts and outcomes in both new and current public health incubators. Expansion funds for public health incubators will support the regional staffing, evaluation, and marketing necessary to reach project goals, assess effectiveness, and disseminate findings for the current and new incubator collaboratives such that all North Carolina counties can participate in the NC-PHICs. These funds will also allow the continued support of innovative regional projects that impact the entire state.

In addition to building and sustaining regional collaboration and public health capacity, funding for public health incubators will continue to support the coordination of the overall NC-PHICs program and assure that regions are working not only within their voluntary associations, but among incubators state-wide to prevent duplication of effort and to encourage sharing of lessons learned and effective public health practices.

Budget
- $2,000,000 in recurring funds to support regional public health incubators for all North Carolina counties.

FTEs - 2 state; 8 regional

8. Establish a Local Health Department Voluntary Consolidation Incentive Fund in the Division of Public Health with initial funding of $250,000 for use by the State Health Director.

Needs Addressed/Rationale
For the past 30 years, various efforts have been made to consolidate local health departments into a fewer number. North Carolina's strong tradition of local control has consistently resulted in the decision to maintain county health departments with the exception of a few, well-established district health departments. After thorough discussion, it was the unanimous decision of the Committee that the drive for efficiency, effectiveness and possible structural change should rest on the shoulders of accreditation. Committee members strongly voiced the need for maintaining autonomous, individual departments in counties so desiring, unless a structured accreditation and competent follow-up proves that the individual agency cannot provide quality essential services for the county's residents.

Part I: Core Infrastructure Recommendations

Structure & Organization Committee

In the early 1970s, the N.C. General Assembly appropriated funding that was used to encourage the voluntary consolidation of local health departments in the state. New incentive funds will help further the voluntary consolidation effort and help build a stronger, more efficient local public health delivery system.

Infrastructure/Capacity Improvement
Implementation of this recommendation would help strengthen some local health departments that may struggle to provide core public health services in their current structure. This recommendation is a new approach which, through increased accountability and the implementation of an accreditation system, would allow locally determined collaborations to evolve to include the creation of new district health departments.

Budget
- $250,000 annually

FTEs - 0 state; 0 local

9. The pay and compensation requirements of the public health workforce should be fully funded so that:

- Staff in critical and difficult-to-retain positions are not lost;
- Hiring managers are able to compete in recruiting for the bestqualified employees;
- Hiring managers are able to compete in recruiting a diversified Public Health workforce;
- Current and future public health services to citizens are not negatively impacted by staffing shortages;
- A workable, functioning career progression ladder is achieved; and
- Equity funding is budgeted to address historic pay inequities.

Needs Addressed/Rationale

The most frequently cited reason for staff turnover given by state and local public health managers is their inability to retain qualified, seasoned staff. It is the noncompetitive, inflexible salary structure of most state and local public health jobs that leads to the loss of highly qualified and experienced staff. Critical public health staff often leave because an adjacent county, an adjacent state or the private sector heavily competes for well-trained and experienced public health staff. Federal labor data estimate that by 2010, the U.S. will have a ten-million worker shortfall. The heaviest demand for workers will be in the technical and scientific fields. Human resource offices report that voluntary turnover rates are already expressing this turnover shortfall estimate; for FY 05-06 these Public Health classifications are experiencing high rates of turnover: Medical Laboratory Technologist I (30%); Staff Nurse (36.36%); Physical Therapist II (13.64%); and Occupational Therapist I (13.33%).

A significant constraint for public health hiring managers is the fact that salary funds in many professional, technical and scientific positions are so low that only the minimum hiring rate can be offered. For public health to be successful in recruiting and retaining these valuable workers, full salary funding must be available to hire at the mid-range of salaries or above.

Infrastructure/Capacity Improvement

Fully funding the state Career Banding Plan is critical to improving pay/compensation and building a career ladder in public health jobs. Should the state take the lead in this area, there should be similar adoption of progressive workforce development and planning simultaneously at the local level.

Budget

- $2,000,000
  - $1,000,000 - Funding for salary budget increases to offer key positions at the mid-range or above in competitive recruitment and for equity funding to retain critical staff (Technical and professional public health workforce)
  - $1,000,000 - Currently Public Health has identified $912,052 ($504,618 in appropriated funds) needed to fulfill range revision, special minimum rates and "right to reserve" reallocations. Balance is for additional salary adjustments and special entry rates already approved but not funded.

FTEs - 0 state; 0 local

10. An assessment of the needs of the North Carolina public health workforce should be conducted that includes:

- A short-term workforce assessment study; and
- Identification and dissemination of core public health competencies.

Needs Addressed/Rationale

The information collected in the learning management system and in the State Center for Health Statistics' (SCHS) facility survey should be analyzed for data gaps about the public health workforce. Additional questions/data fields should be added to these existing data collection processes to ensure that needed data on the public health workforce is available. Funding is requested to integrate the two surveys and add missing data fields.

Recent studies have shown that the current public health workforce is unevenly prepared to meet today's challenges. An estimated 80 percent of the workforce lacks formal training in public health, according to the Centers for Disease Control and Prevention – Agency for Toxic Substances and Disease Registry (CDC-ATSDR, 2001). Changes in technology, biomedical science, informatics, and community expectations will continue to redefine the practice of public health, requiring that current public health practitioners receive training and support to update their skills (Pew Health Professions Commission, 1998). This lack of current knowledge about what key positions and roles constitute the North Carolina Public Health workforce heightens the need to have a true counting or enumeration of the workforce in public health.

Budget
- $168,000 to conduct workforce assessment study, develop and disseminate core competencies. (Assumes 5% increase above 2004 request)

FTEs - 0 state; 0 local

11. North Carolina should commit to achieving an adequately trained public health workforce.

Needs Addressed/Rationale
The public health workforce is aging, and many are approaching retirement. According to the N.C. Center for Public Health Preparedness, the average age of the workforce is 45+ years of age. Recruitment is more difficult in public health because of a lack of clarity about what public health does. Turnover in the public health workplace also is a major issue that complicates workforce preparedness planning.

Currently there are 188 public health job titles in the state public health personnel system (DHHS) and 173 in local public health personnel systems. There are also public health classifications within DENR for which numbers are not available at this time. This has created many difficulties in workforce preparation. Often titles differ only in level, not in function, and are simply designed to create a pseudo career ladder for public health workers.

As mentioned above, recent studies have shown that the current public health workforce is unevenly prepared to meet the challenges in the practice of public health today.

Infrastructure/Capacity Improvement
Implementation of this recommendation will include:
- Developing and implementing an outreach and recruitment marketing plan to ensure an adequate, capable, culturally competent and diverse public health workforce. Funds are to be used as a recruitment tool for professionals in other fields, not for students enrolled in a degree program. Three to five people a year would be selected for a limited-time exposure to public health professionals in local and/or state agencies. Details for the program are to be developed and administered by state public health division's office.
- Fully funding necessary maintenance and operational needs of the Public Health Training & Information Network (PHTIN). The Reconvened 2006 Committee on Workforce Development members fully support that the PHTIN

network be fully funded, with recurring funds, at an appropriate level determined by a new review. This review, along with an updated "blueprint of the future," should identify the technology and human resource needs of a new PHTIN to meet emerging public health workforce training needs. Such a review should also explore Webinar, Webcasting, and computer-to-computer options for future incorporation into PHTIN, or as new routes of system development.

- Creating public health internships at the state and local level.
- Creating public health scholarships and loan repayment programs. Scholarships do not cover need, but should be considered a starting point. Service to state/local agencies for both scholarships and loan repayment for a specified period of time is required in return.
- Requiring training for Board of Health members. Particular emphasis was noted from committee members that continuing funding remains a critical need for sustaining and enhancing Board of Health Training to ensure the existing training is positioned to better prepare local boards to meet emerging public health challenges.

This will ensure that all public health practitioners have a basic set of competencies involving general knowledge, skills, and abilities to function as part of their public health organization or system (CDC-ATSDR, 2000; DHHS, 2000; CDC, 2001d).

Budget
- $1,179,150
  - $10,500 Recruitment Marketing Plan
  - $486,150 PHTIN
  - $157,500 Internships
  - $210,000 Scholarships
  - $210,000 Loan Repayment
  - $105,000 Board of Health Training
    (Assumes 5% increase above 2004 request)

FTEs - 0 state; 0 local

12. Improve data and epidemiology to guide state and local decision-making and allocation of resources.

Part I: Core Infrastructure Recommendations

Planning & Outcomes Committee

Needs Addressed/Rationale

A cornerstone of good public health practice is sound epidemiology utilizing the best available data to make the best evidence-based decisions that benefit the most people. The range of data needs to provide a solid scientific basis for public health decisionmaking. Primary data collection, such as community surveys, is the best way to get valuable information on health directly from our citizens. Information technology advances make more and better data available on a much timelier basis; however, public health lacks sufficient capacity to collect and analyze even the existing data. Additionally, the lack of a common set of public health indicators makes it difficult to monitor the state's health, identify and communicate gaps and priorities, develop and implement statewide plans, and adequately correlate resources to high-priority issues. Establishing a common set of indicators will provide a clear statement for public health business and can bused to monitor the health of the state and to manage state/local resources. Building the epidemiology capacity at the state level will ensure that consistent, quality data are available to all counties.

Infrastructure/Capacity Improvement

Implementation of this recommendation would:

- Establish a common set of core health indicators.
- Build capacity to collect additional Behavioral Risk Factor Surveillance Survey (BRFSS) and Child Health Assessment Monitoring Program (CHAMP) data that will provide county specific or multi-county data through increased funding and the addition of two new statisticians.
- Enhance the opportunities to collect and report county-specific or multi-county behavioral and physical health information on children. Specific examples include greater local school system participation in the Youth Risk Behavior Survey and physical health indicator data surrounding the childhood obesity problem.
- Establish two epidemiologist positions to work directly with local health departments to identify and analyze existing state and local public health problems, health disparities, and potential threats.
- Identify the best scientific and evidence-based strategies to address identified public health problems at the local level.
- Disseminate quality public health data for use by local partners.
- Provide epidemiology training for local partners.

Planning and Outcomes Committee

Budget

- $1,050,000
  - $450,000 BRFSS
  - $200,000 PH problem and threat assessment capacity
  - $200,000 Epidemiology training

FTEs - 4 state; 0 local

13. Fund local health departments to assess and document community health needs and provide critical information and resources for state and local health planning.

Needs Addressed/Rationale

Community Health Assessment (CHA) is a public health core function. It interfaces with several essential services that guide public health practice. CHA is also a critical part of the accreditation of public health agencies. Local public health agencies are mandated to conduct a collaborative, comprehensive CHA every four years that must include a review and analysis of secondary data, collection of primary data, and development of community action plans. Primary data collection is key in engaging community members in discussion and planning for community health improvement. During the interim three years, the local health department is required to issue a State of the County's Health report to inform the community of emerging health issues, new initiatives that address health issues, and update residents about priority issues. Currently, there are no state funds to support this critical function at either the state or local level. Without funding, local public health departments are compromised in conducting quality CHA.

A fully funded CHA system will inform each county of its health status, provide information for planning both at the local and state levels, support accountability and continuous quality improvement in public health, and enable the local health agency to be accredited.

North Carolina's local public health agencies work within a comprehensive, collaborative planning process called Healthy Carolinians. Healthy Carolinians (HC) is a network of local partnerships representing public health agencies, hospitals, health and human service organizations, businesses, churches, schools, media, elected officials and county level. These partnerships identify priorities based on the findings of the CHA and, through a collaborative planning process, develop effective strategies, mobilize resources for programs, and evaluate the strategies to measure health outcomes. This collaborative process fosters good communication within public health and human services, coordination of programs and services, and cooperation toward health improvement outcomes. Healthy Carolinians has the potential of becoming the health

promotion/disease prevention arm for the Community Care of North Carolina (CCNC). Funding will enable HC partnerships to work collaboratively with CCNC to help achieve the common goal of community health improvement and management of health care dollars.

While the General Assembly has provided funding for Healthy Carolinians, the appropriations have not been recurring. Ongoing funding is essential to assure comprehensive planning for community health improvement based on CHA.

Infrastructure/Capacity Improvement
Implementation of this recommendation will:

- Fund a uniform statewide process for community health assessment to be conducted on a four-year cycle (comprehensive Community Health Assessment) and updated annually (State of the County Report). Develop and implement a collaborative four-year State Public Health Plan, which will be updated annually.

- Build capacity of the state Office of Healthy Carolinians/Health Education (OHC/HE) which will support local CHA through local training and technical assistance, and provide reports to state programs to inform state level planning. OHC/HE will compile and report information on local needs, community priorities, and action plans for state-level programs.

- Establish an annual integrated planning cycle to inform state and local decision-makers regarding program priorities and funding allocations. OHC/HE will facilitate the state-level planning cycle.

Permanent funding to support Community Health Assessment: $2,885,000

- $2,150,000 ($25,000/LHD/year) funding for local health departments to support ongoing Community Health Assessment and planning once every four years, as well as the State of the County's Report (SOTCH) during the interim three years. This is critical to assure that the LHD meets the requirements for Accreditation and the obligations of the Consolidated Agreement with the state.

- $85,000 (1 FTE) permanent position at the state level that will take on the work that is currently being accomplished by a CDC Prevention Specialist.

Part I: Core Infrastructure Recommendations

Planning and Outcomes Committee

- $600,000 for seven regional epidemiologists to train and provide technical assistance for LHD personnel. Because it is critical that data collection and analysis follow the practice of epidemiology so assessment and identification of priorities are accurate and the community is well informed, each LHD should have access to an epidemiologist. These positions will be state employees, but each will live in the region that he/she supports.

- $50,000 will be needed to provide overhead support, travel, training expenses, etc. for Community Health Assessment.

Permanent funding to support Healthy Carolinians:

- $2,000,000 in recurring funding for HC Partnerships to support col laborative community health planning to address CHA priorities aligned with North Carolina's 2010 health objectives (e.g., chronic diseases, injury, communicable diseases, adolescent health, access to health care, health issues of older adults). These funds will also be used to develop the health promotion/disease prevention arm for Community Care North Carolina.

Budget
- $2,885,000 Community Health Assessment
  - $735,000 (state)
    - $85,000 1 FTE in OCH-HE
    - $50,000 Overhead, travel, training
    - $600,000 7 Epidemiologists
  - $2,150,000 (local)
- $2,000,000 Healthy Carolinians

FTEs - 8 state; 0 local

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14. Fund increased information technology capacity at the local level to collect, compile, analyze, and report essential public health data.

Needs Addressed/Rationale

Technology capacity is critical for all phases of public health practice, especially community health assessment. The need to collect, compile, analyze, report data is key to fully providing the essential services required by public health. Because technology capacity has been left to community resources, it is not uniform across the state. With accreditation, required community assessment, and other reporting requirements, it is critical to assure that all local public health agencies have a minimum standard of technology capacity.

Infrastructure/Capacity Improvement

Build local capacity to collect, analyze, and report critical public health information electronically. Assure compliance with HIPAA guidelines. Build the local interface with the *Public Health Information Network* to enhance the ability of local health departments, hospitals, healthcare providers, and community partners to communicate electronically in a secure environment.

Budget

- $5,160,000 - local information management

FTEs - 0 state; 0 local

Part I: Core Infrastructure Recommendations

Finance Committee

15. Increase non-categorical General Aid to County funds to improve the delivery of the ten essential public health services in all counties and to include an emphasis on low-wealth and economically distressed counties.

Needs Addressed/Rationale

The original allocation of $5,200,000/year, set in 1972, has never been adjusted for inflation and was actually reduced to $4,800,000 during the recent budget crisis. Based on the Consumer Price Index, $5,000,000 in 1972 would have been worth $23,400,000 in 2005. Non-categorical aid is essential for supporting needed flexibility at the local level and ensuring adequate and timely delivery of public health services.

North Carolina counties vary greatly in their ability to pay for essential public services. This concept has been recognized in the public school funding to enable students across the state to have more equal educational opportunities. Low-wealth status of counties was factored into the school health nurses' distribution formula. Components of this formula could be used as a starting point for consideration in awarding other funds obtained for public health, since it includes the concept of ability to pay (low wealth) in the calculation.

Residents from Murphy to Manteo deserve consistent high-quality public health services. In some areas, it clearly costs more to provide the same services well. Some counties have more funding available for essential and optional services. To provide for consistent public health services, additional targeted funding must be obtained and a distribution methodology must be identified and implemented to account for these low-wealth differences.

Infrastructure/Capacity Improvement

Public school funding models could be used to develop appropriate public health funding models in disadvantaged areas where health disparities are often the greatest. The PH school nursing funding formula also includes low wealth as a concept forallocation of scarce resources. This study should to be done in concert with local public health, county commissioners and state officials. Sources of good data include hospital uncompensated care data, the school funding formula, and the new school health nurse funding formula for distribution of funds in poorer counties.

Budget

- $25,000,000 annually, to be adjusted for inflation on an annual basis.

Part I: Core Infrastructure Recommendations

Finance Committee

16. Support legislation to create a new permanent funding source for the Universal Vaccine Program.

Needs Addressed/Rationale

While vaccines are among the most cost-effective interventions in health care, the ongoing development of effective but costly new vaccines creates a great challenge to policymakers who strive to sustain a universal vaccine program in North Carolina.

While the main beneficiaries of the universal program are the people of the state, insurance companies doing business in North Carolina also benefit from the presence of a program that provides critical services to persons enrolled in private insurance plans free of charge to these insurers. Cost of vaccines, especially at the retail level, are significantly higher than those purchased by the state on a federal contract. Therefore, legislation that secured a small percentage of each commercial insurance premium to defray the costs of universal vaccine provision would be equitable and would provide a reliable source of ongoing funding to support the universal provision of vaccines.

17. Authorize local health departments to charge fees for food and lodging program activities at the local level to help cover operational costs.

Needs Addressed/Rationale

Local health directors and county commissioners on the finance committee highlighted the tremendous local burden that environmental health services/ programs place on county governments. It is clear from several of the documents reviewed, as well as the review of DPH funding, that the amount of funding that the state provides to local health departments to support environmental health is extremely small. Local health departments are allowed to charge a fee to support the on-site sewage program (septic tank permitting) in their counties. This fee is set by the Board of Health and varies by health department. However, it is the local option to determine how the fee base and how much of local appropriations are used to support this activity.

In contrast, local public health agencies are currently prohibited by state statute to charge a fee to support the Food and Lodging Program. Each food establishment is charged a $50 annual state fee. Those funds come to the state and are redistributed to locals in a base amount of $5,500, with an additional amount provided if 100 percent of the county's restaurants are inspected the appropriate number of times. The total amount that any health department receives is significantly below the cost of the program – ranging from $.07 to $.66 per capita.

Part I: Core Infrastructure Recommendations

Infrastructure/Capacity Improvement
Legislative action is required to allow local health departments to charge fees for food and lodging activity. State fees could be eliminated if local fee options were implemented, but additional state appropriations would be needed to replace the funding that the N.C. Department of Environment and Natural Resources – Division of Environmental Health (DENR-EH) retains for state activity.

Budget
No new funds required.

Finance Committee

18. Assure that a mechanism is developed that allows LHD and Child Development Service Agency (CDSA) Medicaid rates to be updated annually to more accurately reflect the cost of providing services in these settings.

Needs Addressed/Rationale
Currently, LHDs and CDSAs receive federal payment of only 70% of their costs not covered by Medicaid reimbursements. This causes LHDs to not generate the Medicaid receipts/revenues in keeping with the actual cost of providing services. Medicaid rate adjustments for these services are not on any routine updating schedule. This combined situation costs LHDs and CDSAs $18,000,000/year by receiving only the federal share of the settlement.

Infrastructure/ Capacity Improvement
Unrecovered cost reimbursement and enhanced capabilities for documentation of associated Medicaid costs and services.

Budget
- $18,330,046/yr.
  - $15,275,039 (state); $3,065,007 (local)

FTEs - 0 state; 0 local

19. The state should permanently fund the county Medicaid share and direct that an appropriate portion of freed-up county revenue be appropriated for local infrastructure and service needs. The task force recommends that a significant portion of these revenues be used to target health and human service needs.

Part I: Core Infrastructure Recommendations

Finance Committee

Needs Addressed/Rationale

County commissioners and local health directors on the Finance Committee repeatedly stressed the burden that the local Medicaid match inflicts on county government, denying adequate funding to support many critical services needed by local residents.

The majority of committee members agreed that this burden should be relieved by the state. There was no consensus on whether a percentage of the resulting county funds should be designated by the state for public health purposes. Or, if a percentage were to be designated, here was no consensus on what percentage should be designated. Final consensus was that all agencies of county government would benefit from this relief, including public health, and that this Task Force must recommend that a significant percentage of the local revenue freed up be directed to local public health for infrastructure and core service gaps. North Carolina is the only state with a county Medicaid match.

Estimated cost from research done by various legislative committees and stated in multiple legislation that has been introduced for this purpose is approximately $500,000,000 per year.

Budget

- Exact costs to be determined.

FTEs - 0 state; 0 local

20. Secure state funding to continue the development of the Health Information System (HIS) as a partnership with local health departments.

Needs Addressed/Rationale

The state's Health Services Information System (HSIS) is totally outdated and does not meet state or local health department needs. Sixty-five county departments are totally dependent on HSIS for all reporting and billing activities. These departments provide one-third of the total services reported/billed to the state from local public health. The remaining 20 departments, which are larger and better funded, have purchased propriety software applications that provide them a much more robust management information system. But, those departments must send their statistics to the state DPH through an interface with HSIS, the only system that DPH has for this activity. The seven individual vendor applications of these health departments must interface with HSIS and are essential for the state and local health departments. It is becoming more and more difficult to get the HSIS state system to appropriately interface with these newer systems. Failed transmissions of data occuring for whatever reason impact county Medicaid

cash flow and require extensive staff time to resolve the problem and resend the information.

Local health departments have already begun to provide funding to the state in support of this project. Two other divisions in DHHS have been involved in the development of detailed business requirements and may participate in its funding.

Budget
Note: FY 2007 is the highest year of development costs – approximately $15,000,000. Local health departments are estimated to contribute $5,000,000 through Medicaid Administrative Claiming (Random Moment Time Studies), with the remaining $10,000,000 to come from state appropriations.

- $10,000,000 (state)
- $5,000,000 (local)

21. Re-convene and charge the public health study commission to assess the broad issues of funding Public Health in North Carolina, including:

- Conducting an analysis of the funding of public health at all levels of government within N.C. (state and local responsibilities). The study should determine "who should pay for public health" and include an assessment of how other states support public health.
- Documenting the "real costs" of underfunding public health by identifying decreased health outcomes and health promotion/ disease prevention activities curtailed or not offered as a result of under-funding.
- Conducting oversight of the implementation of a revised system of public health financing in North Carolina.

Needs Addressed/Rationale
There is a critical need for an updated review and assessment of the state's system of public health financing. The evolution of funding for public health has not always reflected an adequate appraisal of needs nor a thorough assessment of potential funding sources, particularly with regard to equity and state-local contributions. The review called for in this recommendation needs to be conducted by a body with the necessary expertise, experience and authority to ensure that progress will occur.

Budget Summary

Item	Amount
• School Nurse Services	$13,000,000 (2007 – 2008)*
• HIV/AIDS Prevention & Control	$3,341,656
• HIV/AIDS Drug Assistance Program (ADAP)	No new funding requested.
• Eliminating Health Disparities: Title VI Compliance	$4,815,000
• Eliminating Health Disparities: Community Grants	$3,000,000
• Chronic Disease Prevention	$8,099,200
• Injury Prevention	$970,000
• Immunizations/Universal Vaccine Program	$35,900,569
• Environmental Health	$5,428,111
• Early Intervention	$10,600,000

* First year (2007 – 2008) of Five- (or Ten-) Year Plan (see following section)

Part II: Core Service Gap Recommendations

School Nurse Services

School Nurse Services

Need Addressed/Rationale

The School Nurse Funding Initiative (SNFI) provided by the General Assembly in HB 1414 on July 18, 2004 provided 80 permanent and 65 two-year school nurse positions. This initiative improved the nurse-to-student ratio from 1:1,897 in the 2003-04 school year to 1:1,593 in 2004-05. The highest nurse-to-student ratio in a local education agency (LEA) was 1:4,537 after the first year of implementation, compared to 1:7,082 before implementation. All LEAs in the state now have at least two school nurse positions. Twenty-one LEAs met the recommended 1:750 ratio in 2004-05, compared to 10 LEAs that met the recommendation prior to SNFI implementation.

Despite a 31,686 student enrollment increase in 2005-06, the nurse/student ratio improved slightly, from 1:1,593 to 1:1,571, due to an increase of 30 school nurse FTEs. Most positions were provided by new local or foundation funds. A few were previously funded vacant positions that were filled in 05-06.

- The 65 two-year positions were made permanent for 2006-07 and beyond.
  However, the 227 additional positions recommended by the Public Health Task Force for FY 05-06 and 292 positions recommended for 06-07 were not funded. The SNFI funding helped focus an emphasis on school nurses at the local level, and a few LEAs increased local funding in 2005-06.
- Attached are two options for reaching the 1:750 school nurse to student ratio. One is a five-year plan and the second is a ten-year plan. For discussion purposes, $60,000 per position was used in the cost projections. Hiring at the $50,000 funding level has been difficult. Some LEAs have added local funds in order to attract experienced school nurses.

Infrastructure/Capacity Improvement

The table below depicts a five-year plan to achieve the national standard school nurse-to-student ratio of 1:750.

Five-Year Plan for Reaching 1:750 School Nurse-to-Student Ratio

School Year	School Enrollment	School Nurse FTEs	School Nurse to-Student Ratio
2004-05	1,332,009	836	1:1593

School Year	Projected Student Enrollment*	FTEs if No Position Increase	Ratio if no Position Increase	New Positions Needed to Reach 1:750 by 2015	School Nurse FTEs with New Postitions	SN-to-Student Ratio	FY Cost** (millions) for New Positions
2005-06	1,353,483	836	1:1619	0	0	1:1619	
2006-07	1,371,636	836	1:1641	0	0	1:1641	
2007-08	1,385,365	836	1:1657	217	1053	1:1309	$13.0
2008-09	1,396,467	836	1:1670	217	1270	1:1092	$26.0
2009-10	1,408,815	836	1:1685	217	1487	1:947	$39.0
2010-11	1,423,144	836	1:1702	217	1704	1:835	$52.0
2011-12	1,441,848	836	1:1724	218	1922	1:750	$65.1
				1,086			

* Department of Public Instruction

** $60,000 per position

Budget

Funds required: $13,000,000 per year for first five years.

Infrastructure/Capacity Improvement
The table below depicts a ten-year plan to achieve the national standard school nurse-to-student ratio of 1:750.

Ten-Year Plan for Reaching 1:750 School Nurse-to-Student Ratio

School Year	School Enrollment	School Nurse FTEs	School Nurse to-Student Ratio				
2004-05	1,332,009	836	1:1593				
	Projected Student Enrollment*	FTEs if No Position Increase	Ratio if no Position Increase	New Positions Needed to Reach 1:750 by 2015	School Nurse FTEs with New Postitions	SN-to-Student Ratio	FY Cost** (millions) for New Positions
2005-06	1,353,483	836	1:1619	0	0	1:1619	
2006-07	1,371,636	836	1:1641	0	0	1:1641	
2007-08	1,385,365	836	1:1657	120	956	1:1449	$7.2
2008-09	1,396,467	836	1:1670	120	1076	1:1298	$14.4
2009-10	1,408,815	836	1:1685	120	1196	1:1177	$21.6
2010-11	1,423,144	836	1:1702	120	1316	1:1081	$28.8
2011-12	1,441,848	836	1:1725	121	1437	1:1003	$36.1
2012-13	1,461,843	836	1:1749	121	1558	1:938	$43.4
2013-14	1,484,584	836	1:1776	121	1679	1:884	$50.7
2014-15	1,509,550	836	1:1806	121	1800	1:838	$58.0
2015-16	1,514,610	836	1:1812	121	1921	1:788	$65.3
2016-17	1,531,144	836	1:1831	121	2042	1:750	$72.6
				1,206			

* Department of Public Instruction through 2015 (2016-2017 projected growth trend)

** $60,000 per position

Budget
Funds required: $7,200,000 per year for first four years; $7,300,000 for each of next six years.

HIV/AIDS Prevention & Control

Needs Addressed/Rationale

The number of new HIV and AIDS cases reported in North Carolina has increased annually since 2000. Although great strides have been made, much remains to be done. HIV and other STDs disproportionately affect minority populations. Local health departments, community-based organizations, historically black colleges and universities, and HIV care consortia provide the most direct, appropriate and effective links to the communities and populations at highest risk. These organizations and agencies are not adequately funded, equipped or staffed to provide the variety and magnitude of services required to effectively slow the spread of the disease in the affected communities and populations. African Americans currently comprise 70 percent of the persons living with HIV/AIDS in NC; the rate of HIV infection among Hispanics has increased from 12.3 per 100,000 in 2000 to 24.2 per 100,000 in 2005.

Infrastructure/Capacity Improvement

This multi-faceted initiative will increase the capacity of local health departments, community-based organizations, historically black colleges and universities, and the state agency charged with HIV/STD prevention and care. The goal will be to significantly increase the number of persons who benefit from the full spectrum of HIV prevention activities – risk reduction and awareness education, counseling, testing, and early medical intervention. Community and campus-based access to HIV counseling and testing, using a combination of rapid and serologic testing techniques, will enhance both community and individual awareness and help ensure early access to care. Once identified, infected persons will benefit from "prevention for positives" activities that will include the hiring of care coordinators at the local level to help ensure that clients remain in care. This effort will decrease the number of persons who are unknowingly infected with HIV/AIDS, assist them with early access to care services and keep them in care.

Also required is legislation that authorizes the State Health Director to approve the implementation of Clean Syringe Exchange Projects (CSEP) in selected counties. In order for such an initiative to be approved, a county plan would need to be developed and agreed upon by selected individuals/officials within the county and approved by the County/District Health Director. The N.C. Division of Public Health would be authorized to provide technical assistance to interested counties and would develop and implement an evaluation plan for the project. These combined and expanded community-based strategies will reduce the on-going spread of HIV/AIDS in North Carolina, especially in poverty-stricken, minority communities that are disproportionately affected.

Budget

- Total funds required: $3,441,656
  - $2,000,000 for community-based organizations and historically black colleges and universities
  - $1,341,656 for local health departments
  - $100,000 for the evaluation of the CSEP

Part II: Core Service Gap Recommendations

HIV/AIDS Drug Assistance Program (ADAP)

HIV/AIDS Prevention Drug Assistance Program

Needs Addressed/Rationale

The N.C. AIDS Drug Assistance Program (ADAP) has had a waiting list for services for a significant portion of the past ten years (since fall 1996). At several points during this 10-year period, the number of low-income North Carolinians living with HIV disease who were on the Waiting List approached 1,000. Individuals who need but are not able to access the ADAP Program to obtain their essential, life-sustaining medications often show up in hospital emergency rooms and/or other health care facilities requiring more intensive – and more expensive – medical care. The deterioration of their health status often leads to their becoming eligible for other public programs such as Medicaid, resulting in significantly larger and longer-term public payments than if they had been participating in ADAP. People who can't get their medications on a regular basis are typically sicker, and frequently become unable to work. This may increase their dependence on unemployment insurance and other public programs as well as on Medicaid.

HIV prevention efforts are also hindered when infected individuals cannot obtain their medications on an ongoing basis. Persons living with HIV/AIDS that are on medications tend to have lower viral loads (i.e., less virus in their blood), which reduces the probability of transmitting the disease to others. Individuals on medication are also more likely to be in medical care, providing an opportunity for ongoing monitoring and prevention counseling.

Infrastructure/Capacity Improvement

Increasing the financial eligibility criterion for the program to at least 200 percent (and preferably 250 percent) of the federal poverty level is required if ADAP is to be able to serve the majority of low-income North Carolinians living with HIV disease who are without any other source of payment for access to their medications; current legislative budgetary efforts indicate that an eligibility increase may be possible in SFY 2007.

Budget

- For SFY 2007, eligibility can be raised without additional funding; for the longer term, additional funding will be required.
- No increase in state/federal appropriations is required to increase the financial eligibility criterion to 200 percent of the federal poverty level.
- Any increase in state/federal appropriations that may be required to increase the financial eligibility criterion to 250 percent of the federal poverty level will be determined based upon analysis of the impact of the spending increase to 200 percent.

FTEs - 0 state; 0 local

Eliminating Health Disparities: Title VI Compliance

Needs Addressed/Rationale

In August 2000, President Bill Clinton signed Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency (LEP)." The Executive Order also requires federal agencies to examine the services they provide, identify any need for services to those with Limited English Proficiency, and create a system to provide those services. The Executive Order also requires that federal agencies work to ensure that recipients of federal financial assistance (like public health departments) provide meaningful access to their LEP clients. Title VI of the Civil Rights Act says that a program receiving federal dollars cannot discriminate against any client because of race, color or national origin. The courts have held that Title VI prohibits recipients of federal financial assistance from denying LEP persons access to programs,on the basis of their national origin.

North Carolina has a diverse population – 21.4 percent African Americans, 4.7 percent Hispanic/Latinos, 1.4 percent Asian, and 1.2 percent American Indians. According to the 2000 U.S. Census figures, the Latino population grew by 394 percent between 1990 and 2000, the largest increase of any state in the country. The report, *The Economic Impact of the Hispanic Population on the State of North Carolina*, published by John D. Kasarda and James H Johnson, Jr., January 2006, revealed that in 2004, the North Carolina Hispanic/Latino population comprised 7 percent of the state's population, for a total of 600,913. Hispanics/Latinos accounted for 27.5 percent of the state's population growth from 1990 to 2004.

The demand has increased for providers in the health and human service fields who are culturally and linguistically qualified. The growing number of Latinos in North Carolina has presented new challenges to health and human service providers. Language is the most significant barrier to providing adequate care for Latino clients. In a December 2003 assessment of local health departments and community-based organizations, cultural diversity training and interpreters were identified as resources needed to support the agencies' efforts to provide effective services to clients.

In January 2006, an interpreter services survey was disseminated to all local health departments in North Carolina by NCALHD (N.C. Association of Local Health Directors) in a joint effort with the N.C. Office of Minority Health and Health Disparities (OMHHD). The survey was developed in response to a request from MHAC (Minority Health Advisory Council). Seventy-four (74) out of 85 local health departments responded to the survey (87 percent). The survey addressed the following issues:

- The number of full-time, part-time, and contract interpreters
- The estimated annual cost for interpreter services

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Eliminating Health Disparities: Title VI Compliance

- The ways that interpreter services positions are funded
- The ways that health departments communicate with LEP clients, if an interpreter is not on-site

Infrastructure/Capacity Improvement

The North Carolina General Assembly appropriated a recurrent amount to fund a program aimed at creating new full-time positions for interpreter services at the local health departments to enhance their capacity to serve LEP clients. With the allocated funding, 11 health departments were funded through the NCOMHHD for a 3-year period beginning FY05/06. An end-of-year report was requested from all the grantees to show their outcomes, challenges, and/or successes. The report showed that the new interpreters reach 7,506 LEP clients in a two- to four-month period. It would be beneficial to LEP clients if we could expand the program statewide. In order to expand the program statewide, additional funding is being recommended to increase the number of health departments from 11 to 85.

It is a federal mandate to comply with the 1964 Civil Rights Act, Title VI. It is recommended that one (1) full-time position be created to:

- Train compliance officers at local health departments and other DPH agencies; and
- Address Title VI issues to ensure that health departments are complying with the mandate.

Additional funding is needed to provide training, resource materials, and travel reimbursement.

Budget

• Minority Health – Interpreters*	$4,750,000.00
FTEs-1 Title VI Position	$65,000.00

* This amount is to further support the Minority Health-Interpreter grant that provides funding for the local health departments.

Eliminating Health Disparities: Community Grants

Needs Addressed/Rationale

North Carolina has a long history of defining and addressing issues related to minority health and health disparities. Key state and national policies have played a pivotal role in elevating the issue of eliminating health disparities in our state. Focused attention on the disproportionate burden of disease among racial/ethnic minorities has been gaining momentum since the first minority health report was published in 1985 for the nation, *"Report of the Secretary's Task Force on Black and Minority Health"* and in 1987 for the state, *"The Health of Minorities in North Carolina."* These reports set the wheels in motion for the establishment of the N.C. Office of Minority Health and Health Disparities (OMHHD) and the Minority Health Advisory Council (MHAC) in 1992 by House Bill 1340, part 24, Section 165-166.

The mission of OMHHD and MHAC is to promote and advocate for the elimination of health disparities among all racial and ethnic minorities and underserved populations in North Carolina. The MHAC is further mandated to advise the Governor and cabinet Secretary of Health and Human Services on minority health issues.

In 1998, Surgeon General Dr. David Satcher reframed the issues of minority health by challenging the nation to reduce and eliminate disparities in health by 2010 in six categories. These categories include cardiovascular disease, cancer screening and management, infant mortality, diabetes, HIV/AIDS, and immunizations.

In 2000, the U.S. Department of Health and Human Services launched the new Healthy People 2010 goals and objectives. The goal of the national initiative is to bring together national, state and local government agencies, non-profits, volunteers, and other public/private health agencies to improve the health of all Americans, improve years and quality of life, and eliminate disparities in health. This agenda was embraced by the N.C Department of Health and Human Services in 2001, with the appointment of Secretary Hooker Odom. She elevated the issues by challenging the divisions and offices in DHHS to identify and implement strategies to address access, service and health disparities.

Health disparities are defined by the National Institutes of Health as "*the difference in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exists among specific population groups in the United States*." OMHHD's working definition is "*significant differences or inequalities in health that exist between whites and racial/ethnic minorities*." The six areas in health with the greatest disparities in North Carolina include HIV/AIDS and sexually transmitted infections, diabetes, cancer, infant mortality, homicides, and motor vehicle deaths. The State Center for Health Statistics has documented the plight of minorities for years.

In 2003 and 2006, the Office of Minority Health and Health Disparities and the State Center for Health Statistics issued the "Racial and Ethnic Health Disparities in North

Part II: Core Service Gap Recommendations

Eliminating Health Disparities: Community Grants

Carolina Report Card." The purpose of the Report Card is to establish a baseline and set a framework to monitor progress towards eliminating the health status gap between racial and ethnic minorities and the white majority population. This card sets out 37 indicators of health status for racial and ethnic groups. It uses letter grades (A, B, C, D or F) to compare health status indicators. The grades are based on the disparity ratio, the ratio of the measure for a specific racial or ethnic group to the measure for the state's majority white population. Grades of D and F are noted for a number of indicators in the 2006 Report Card. The percent of African American families living below the federal poverty level is 3.4 times higher than that of the white population yielding a grade of F, while the rates for American Indian and Hispanic/Latinos are 2.3 times higher than for whites, resulting in two D grades. The African American infant mortality rate is 2.5 times higher than that of the white population. Diabetes deaths among African Americans earned the state a grade of D for that indicator. HIV disease deaths for African Americans (13.7 ratio) resulted in a grade of F; and the state received two D grades in the areas of Hispanic/Latino deaths (2.4 ratio) and American Indian deaths (1.9 ratio). Homicide deaths among African Americans (3.6 ratio) and American Indians (3.5 ratio) earned F grades, and Hispanic/Latino homicide deaths (2.5 ratio) resulted in another D.

In May 2004, the State Center for Health Statistics and the Office of Minority Health and Health Disparities published a report, *Racial and Ethnic Differences in Health in North Carolina: 2004 Update*. This report demonstrates generally poorer health among African Americans and American Indians in North Carolina compared to whites, across a variety of measures. This report looks at deaths, incidence and risk factors related to injuries, cancer, HIV and sexually transmitted diseases, teen pregnancies, maternal and infant health, etc. These reports strongly assert that, "describing racial and ethnic differences in health is crucial because it allows the targeting of resources and culturally appropriate health improvement programs toward populations in need."

Infrastructure/Capacity Improvement

In response, the 2005 General Assembly appropriated two million dollars ($2,000,000) to support the Community-Focused Eliminating Health Disparities Initiative (Senate bill 1741, Ratified bill, Section 10.18). The Community-Focused Eliminating Health Disparities Initiative (CFEHDI) provides grants-in-aid to local public health departments, American Indian tribes, and faith-based and community-based organizations to close the gap in the health status of African Americans, Hispanics/Latinos, and American Indians as compared to whites. These grants focus on building the capacity of eligible organizations to develop, implement and evaluate preventive measures to support healthy lifestyles. The areas of focus on health status include infant mortality, HIV-AIDS and sexually transmitted infections, cancer, diabetes, homicides and motor vehicle deaths. These funds are also used to support an epidemiologist position to monitor, track, and evaluate grantees' progress in meeting performance-based standards and outcomes established by the program. Additional funds to support this effort are needed.

Budget

- CFEHDI Grants - $3,000,000 (recurring)

FTEs - One Project Manager - $55,000

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Chronic Disease Prevention and Control

Chronic Disease Prevention & Control

Needs Addressed/Rationale

Chronic disease is one of the most important public health issues of our time. Just as infectious diseases threatened the health and well being of communities in the early 20th century, chronic diseases are now the greatest threat of the 21st. Heart disease, stroke, diabetes, and cancer are responsible for the deaths of 15,000 North Carolinians each year – 35 percent of all deaths. The prolonged course of illness from chronic diseases results in extraordinary direct and indirect costs, pain and suffering, poor quality of life, and disability for millions of Americans. It is becoming increasingly clear that we, as a society, cannot afford the current healthcare cost trajectory. These health problems must be prevented.

It is important that every local health department in the state have some resources to engage in evidence-based intervention strategies and the capacity to effectively compete for additional sources of funding from other philanthropic and public-sector institutions. A $1,000,000 reduction in state funding in 2001 and a $1,100,000 reduction in federal funding in 2006 have reduced the baseline level of general health promotion funding that has traditionally been invested in every local health department in the state.

A comprehensive approach to chronic disease prevention also includes state-wide screening programs. Early detection of breast and cervical cancer is one of the most effective public health interventions available. The North Carolina breast and cervical cancer control program increases access to screening and treatment services among the state's uninsured population. Increased screening significantly reduces breast and cervical cancer mortality. Expansion of this valuable program will allow the program to provide cancer screening to more women throughout the state.

Reducing tobacco use has the potential to dramatically reduce the two main causes of death in North Carolina: heart disease and cancer. Conservative estimates from CDC show that tobacco use costs North Carolina's Medicaid program at least $600 million. A solid body of literature demonstrates the effectiveness of tobacco quitlines in treating tobacco addiction. Quitline services have been able to double, or in some cases triple, quit rates at a very low cost. Quitlines offer exceptional convenience and flexibility and can reach low income, rural, elderly, uninsured and racial and ethnic minorities who otherwise may not have access to cessation services. North Carolina currently does not have adequate resources to fund quitline services for the adult population on an ongoing basis.

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Chronic Disease Prevention & Control

Infrastructure/Capacity Improvement

Chronic Disease Prevention and Control

- This proposal builds on the existing Statewide Health Promotion Program to allow each county in N.C. to reach a minimum capacity level of one FTE Health Educator (valued at $50,000) and funds for pilot projects (valued at $20,000). Local programs will be expected to generate additional local funding to implement evidence-based interventions to control chronic disease risk factors and eliminate health disparities.
- Technical assistance to the counties would be expanded by increasing the number of state regional consultants from 3 to 4 (valued at $60,000) and expanding operating expenses by $25,000.

Expand Access to Evidence-Based Screening

- This proposal will expand eligibility from 200 percent to 250 percent of the federal poverty level for participation in the Breast and Cervical Cancer Control Program. The proposed funding will augment current federal funds to provide breast and cervical cancer screening and followup services for at least 8,000 additional underserved women in North Carolina through the work of local health departments and other providers, including community and rural health centers. The funds will also increase the number of women between 40 and 49 who are eligible for breast cancer screening.

Improve Control of Chronic Disease Risk Factors

- This proposal requests basic operational expenses necessary to implement and maintain a quitline for residents across the state who are highly motivated to quit smoking (valued at $1 million). A modest promotional nicotine replacement therapy campaign for disparate, low-income populations is also proposed (valued at approximately $575,000).

Budget

- Total $8,099,200
  - $4,287,700 (Statewide Capacity for Chronic Disease Prevention & Control)
  - $2,236,500 (Expand Access to Evidence-Based Screening)
  - $1,575,000 (Improve Control of Chronic Disease Risk Factors)

Injury & Violence Prevention

Needs Addressed/Rationale

Injuries are pervasive. Injuries are not accidental, random or unpredictable. Injuries that occurred in 2000 will cost the U.S. health care system $80.2 billion in lifetime medical care costs[1]. There will be an estimated 700,000 visits to North Carolina emergency departments for injuries in 2006. They are the leading cause of death in North Carolina residents ages 1 through 44 and the 4th leading cause of death for all ages. More than 5,000 North Carolinians die from their injuries each year. Because fatal injuries occur most often in our younger residents, they result in over 1.5 million years of potential life lost to our families and communities every decade.

Loss of life from injuries disproportionately affects our minority populations. And, the disparity in fatal injury mortality rates by race/ethnicity is often even greater at the county level than reported for the state. For example, since 1999, mortality rates per 100,000 residents for motor vehicle crashes were 60 percent higher for African Americans, 40 percent higher for American Indians and almost 300 percent higher in Latinos of any race living in Robeson County when compared to the statewide motor vehicle crash rates for their racial/ethnic groups.

In 1999, an Institute of Medicine report called for significantly increased funding to strengthen injury surveillance and prevention programs in each state. The ability of public health workers at the state and local levels to be involved in injury prevention is undermined by lack of rapid and comprehensive injury surveillance data and the lack of access to programmatic guidance from injury prevention experts. The ability to perform the essentialservices/core functions of public health has been compromised because there is limited local infrastructure for an effective public health approach to injury and violence prevention. There is no state support to local health departments for developing, implementing or evaluating priority, evidence-based injury and violence prevention programs.

Infrastructure/Capacity Improvement

Surveillance

The Injury and Violence Prevention Branch routinely reports the prevalence, incidence and trends of all fatal and non-fatal injuries in North Carolina and its counties. Special reports are provided when surveillance indicates injuries of epidemic proportions or other areas of concern. Epidemiologists use data obtained from death certificates, the hospital discharge database, medical examiner records, law enforcement reports, and the emergency department database in their surveillance and reporting.

The federal funding for core injury surveillance that funded the injury epidemiologists in the Injury Surveillance Unit of the Injury and Violence Prevention Branch in 2000 ended in 2005. No reliable funding has been obtained to support these positions. This may ultimately undermine the generation of standard and topic-specific injury mortality

Part II: Core Service Gap Recommendations

and morbidity reports for the Division of Public Health, extant injury-related task forces, councils, leadership teams, and other key injury prevention partners at the state and local levels, thus undermining the capacity of local health departments and other injury stakeholders to fund, develop, implement and evaluate evidence-based injury and violence prevention programs. The ability to prevent injuries requires adequate surveillance for monitoring injuries, their causes, and their consequences. Funds for 2.0 FTE Public Health epidemiologists will ensure the capacity to routinely monitor injury and violence events from multiple sources of data, to report findings to stakeholders in prevention, and to organize task forces or other appropriate groups to plan and lead prevention strategies. One prevention program development coordinator at the state level also should be funded.

Injury & Violence Prevention

Prevention

In North Carolina there is no state support to local health departments for injury and violence prevention activities, and limited training and technical assistance from state agencies including the Division of Public Health. Evidence-based prevention strategies exist for many causes of unintentional injury. Strategies for other causes of injury, particularly violence, are under development and need to be implemented and evaluated. Injuries will continue to exact a large toll on individuals, their families and health care systems unless prevention strategies are more widely implemented and evaluated throughout the state.

Seven regional injury prevention programs would be funded at $100,000 each. A State Injury Prevention Coordinator would be based in the Injury and Violence Prevention Branch and will identify and access the many prevention resources at the state and federal level and share them with the local coordinators through a regular and on-going regimen of training and technical assistance.

Budget $970,000

• Injury Surveillance	
2.0 FTE Injury Epidemiologists (existing positions)	$150,704
Surveillance reporting and operations	$40,000
• Prevention Program Development	
FTE Program Coordinator	$64,296
Program development and operations	$15,000
• Regional Injury Prevention Programs (7)	$700,000

[1] Finkelstein EA, Corso PS, Miller TR, and Associates. The Incidence and Economic Burden of Injuries in the United States. Oxford University Press, NY, 2006.

Immunizations/Universal Vaccine Program

Need Addressed/Rationale

The General Assembly has determined that providing all vaccines required by the state free of charge to all children, regardless of family income, is sound public policy. Several reasons support this public policy.

First, universal provision of required vaccines has been shown to effectively increase immunization rates. A disproportionate percentage of the states that have the highest rates of vaccine coverage in the U.S. are "universal" states. This has been the experience in North Carolina as well: prior to the implementation of the universal program, vaccination rates among two-year-olds were approximately 58%. Since the implementation of universal coverage, North Carolina's vaccination coverage has increased to 84 percent and is typically among the very best in the nation.

Second, universal provision of required vaccines is sound public policy because it helps protect members of the public who would otherwise be vulnerable to morbidity and mortality due to preventable communicable diseases. These immunizations create "group immunity" which protects those who cannot be vaccinated for medical reasons, including people with cancer, organ transplants and HIV/AIDS.

Third, immunizations are among the most cost-effective activities engaged in by government, saving $15 for each $1 spent. Supporting the cost of a universal program as a strategy for increasing rates of coverage and preventing disease among both the vaccinated and the unvaccinated (protected because of group immunity) is a cost-saving investment the General Assembly was wise to make.

Fourth, universal provision of required vaccines is a strategy that helps keep children in their medical home, a key public health and medical goal.

Additional rationales for the universal vaccine program include:

- Cost of vaccines, especially at the retail level, are significantly higher than those purchased by the state on a federal contract.
- Studies have shown that children are most likely to get immunized on time if they have a single medical home and as few visits with providers as necessary.
- If parents of children have to pay out-of-pocket each time their child is vaccinated, this can be a barrier to keeping well-child visits and age appropriate vaccinations.

All North Carolina children are eligible to receive, at no cost, all vaccines required to enter the public school system.

Part II: Core Service Gap Recommendations

Immunizations/ Universal Vaccine Program

At the present time, there are five childhood vaccines recommended by the CDC which cannot be provided universally in North Carolina because of insufficient funding. They are: influenza vaccine, PCV7 ("pneumococcal"), rotavirus, MCV4 ("meningococcal"), and HPV (human papillomavirus). Capsule descriptions of the benefits of each of these vaccines are provided below.

Influenza Vaccine

According to the CDC, every year in the United States, on average, 5 percent to 20 percent of the population becomes infected with influenza. More than 200,000 people are hospitalized from flu complications, and about 36,000 people die from flu every year. Influenza vaccine has been shown to substantially decrease morbidity and mortality in target populations as well as to decrease morbidity and associated complications in individuals who are not vaccinated. Although this is not a new vaccine, funding is needed for children 2-5 years old as recommended by the ACIP. ($2,582,606)

PCV7 Vaccine

The streptococcus pneumonia bacterium is the leading cause of bacterial meningitis in the U.S., striking children under one year of age the hardest. About 200 U.S. children die each year from invasive pneumococcal disease. Also, pneumococcal disease also causes 25 percent – 40 percent of middle ear infections in children. ($9,733,654)

Rotavirus Vaccine

Rotavirus vaccine protects infants and young children against rotavirus, an intestinal virus. Rotavirus is one of the most common causes of childhood illness; many ailments that parents or pediatricians describe as "stomach flu" are caused by rotavirus infection. Virtually every child in the world contracts the virus repeatedly by age 5, gradually building immunity. Most children recover from rotavirus at home, but at least 55,000 U.S. children are hospitalizedevery year after becoming dehydrated from vomiting and diarrhea associated with the infection. ($9,793,293)

MCV4 Vaccine

Invasive meningococcal disease strikes adolescents and college-aged students most often and can have a very abrupt onset with very rapid progression of disease. The case fatality rate is 10 percent – 14 percent; up to 19 percent of survivors suffer serious sequelae including deafness, neurological deficit or limb loss. ($2,717,056)

HPV Vaccine

HPV vaccine is the first vaccine developed to prevent cervical cancer, precancerous genital lesions, and genital warts due to HPV. The vaccine is highly effective against four types ofthe HPV virus, including two that cause about 70 percent of cervical cancer. On average, there are 6.2 million new HPV infections, 9,710 new cases of cervical cancer, and 3,700 cervical cancer deaths in the United States each year. Three doses of HPV vaccine should be routinely given to girls when they are 11 or 12 years

old. However, the vaccination series can be started as early as nine years old at the discretion of the physician or health care provider. The recommendation also includes girls and women 13-26 years old because they will benefit from getting the vaccine. This budget request is calculated based on covering one full birth cohort of females (eleven or twelve year olds). ($11,073,960)

Infrastructure/Capacity Improvement
This funding request is restricted to funding for vaccines.

Budget $35,900,569

- Influenza vaccine $2,582,606
- PCV7 vaccine $9,733,654
- Rotavirus vaccine $9,793,293
- MCV4 vaccine $2,717,056
- HPV vaccine $11,073,960

Part II: Core Service Gap Recommendations

Environmental Health

Environmental Health

Needs Addressed/Rationale

The Division of Environmental Health and local health departments administer and enforce the N.C. General Statutes and the sanitation rules of the Commission of Health Services. These mandated programs serve to protect the public health in the areas of: (a) Child-Care Centers; (b) Childhood Lead Poisoning Prevention; (c) Food, Lodging and Institutions; (d) Migrant Housing (MH); (e) On-Site Wastewater (OSWW); (f) Public Swimming Pools; and (g) Tattoos. As North Carolina grows, there is a direct relationship in the increased workload in local health departments. The burden of funding this increased workload and enforcement has impacted county finances. Additional state support is needed at the local level. Funding is requested to provide each county with an additional environmental health specialist.

Infrastructure/Capacity Improvement

An increase in the number of environmental health specialists (FTEs) in local health departments will require legislative action to provide additional funds. Each county would receive one additional environmental health specialist (1 FTE) to meet community needs. An increase in local capacity also is requested, with resource needs determined on a $50,000/county basis.

Budget

- $428,111 - Office of Accreditation Support & Accountability
- $5,000,000 - Local Environmental Health Core Services

FTEs - 7 state; 100 local

Early Intervention

Needs Addressed/Rationale

The Early Intervention Program for infants and toddlers (also known as the Part C program, from the governing federal legislation, the Individuals with Disabilities Education Act (IDEA), serves infants and toddlers who have problems with their development. These very young children (birth to 3 years of age) can be referred to the program by anyone — families, childcare teachers, pediatricians, or other people who work with children. Many children have a disability, but any child who seems to have a disability can be referred. The program is open in all 100 North Carolina counties. Many children are served for multiple years in the program. Children may stay with the program (unless they make enough developmental progress that they are no longer eligible) until they turn three years of age.

Infrastructure/Capacity Improvement

This new recommendation is being included now because there has been a significant increase (approximately 270 percent) in the number of children and families referred to the program. In FY2003-04, there were 4,719 referrals, consistent with the number of referrals in previous years. In 2004-2005, however, there were 17,263 referrals. During 2005-2006, referrals continued at a rate that annualized to over 17,000 a year.

There are several reasons for this increase. New federal legislation (the Child Abuse and Treatment Act [CAPTA]) requires that all infants and toddlers substantiated for abuse or neglect be referred to the program. Medical providers such as pediatricians and family medicine physicians have markedly increased their use of validated screening tools when performing well-child developmental screens, and these evidence-based practices have more effectively identified infants and toddlers for referral. Finally, the program has worked hard to ensure that parents, caretakers, child care providers and others who interact with infants and toddlers are aware of the program and understand what it can offer to infants and toddlers with developmental delay and with conditions associated with developmental delay.

The marked increase in referrals does not represent a sharp increase in the prevalence of developmental delay in infants and toddlers, but rather clearly represents more effective identification of these children. As such, it represents a great opportunity for the state to serve more children in need during the most formative period of their lives, before these problems worsen and become more intractable.

Part 11: Core Service Gap Recommendations

Early Intervention

The increase also presents two serious challenges. The first is the inability of the program to serve the number of children referred with the resources currently available. The second is the inability of the program to move children in a timely fashion from referral into the program. In this way, a critical cornerstone of best practice practice in EI—to intervene early—is compromised.

Budget
- $10,600,000

FTE Position - 76 state; 84 receipt supported

ADDENDA

Automation Report: Public Health Information Network

Automation Report: Public Health Information Network

Improved information technology is one of the most critical infrastructure capacity improvements that the public health system must undertake. The North Carolina Division of Public Health has several information technology initiatives currently in place and in development that will significantly enhance the state's ability to monitor, manage, and respond to the health needs of its citizens. These systems are being developed as a part of the North Carolina Health Information Network (NC-PHIN). These statewide systems will be developed using state and federal resources, with the exception of the Health Information System that will be developed in partnership with local health department. These systems will provide new functionality and linkages to all local users. Below is a synopsis of each initiative and the timeline for development and /or implementation.

North Carolina Public Health Information Network (NC PHIN)

The North Carolina Public Health Information Network (NC-PHIN) is a set of enterprise-level standards of functionality and security under which critical information systems can be developed and shared appropriately. The N.C. Division of Public Health has developed a base technology infrastructure that supports NC-PHIN. The technology infrastructure allows for enhanced communications and the bringing together of public health functions and organizations. It is the overriding goal of information technology efforts within the NC DPH. The infrastructure will be adapted and expanded as applications are implemented.

- Estimated Implementation: In progress

Health Alert Network (HAN)

The North Carolina Health Alert Network was the first component built using standards. It was funded by the CDC Bioterrorism Grant Program. NC-HAN was deployed October 2002. It allows secure Internet browser-based communications among key public health officials and their partners on information about public health emergencies, confirmed or suspected communicable diseases, and other health threats. It does notification by phone, fax, pager and email. The system has proved valuable in dealing with issues such as SARS, E. coli, and West Nile virus. NC-HAN also has a public web site (www.nchan.org) that provides timely and accurate information about public health threats to citizens. The Enhanced Public Health Surveillance initiative will utilize HAN as the alerting and communications system.

- Implemented October 2002

Health Information System (HIS)

This initiative will provide an automated means of capturing, monitoring, reporting and billing services provided in Local Health Departments (LHDs), Child Development Services Agencies (CDSAs) and the State Laboratory of Public Health (SLPH). It will allow for interfaces to LHD-owned systems. It will replace the outdated Health Services Information System (HSIS). A contract has been awarded to Saber Corporation. The software to be installed is the Netsmart Avatar suite of products. The N.C. Division of Public Health is currently working with the vendor on the deliverables and implementation schedule.

- Estimated Implementation: Pilot implementation in January 2007; statewide rollout by fall 2007.

N.C. Immunization Registry (NCIR)
A more robust and feature-rich immunization registry has been implemented. The NCIR contains a single consolidated immunization record for each North Carolina child, regardless of how many immunization providers have treated the child. The information is shared, as required by state law, among immunization providers and other authorized organizations and is used to assure timely and appropriate treatment and to provide official documentation of immunizations given.

The consolidated record will help to assure timely and accurate administration of needed vaccines and prompt access in the event of an outbreak, vaccine recall, and other situations that require rapid identification of immunizations administered. The NCIR provides information that facilitates the safe practice of vaccine service delivery through the analysis of side effects and contraindications specific to each patient.

- Implemented 2005

Vital Records (VR)
The Vital Records Automation Project will improve the birth registration process, along with associated efficiencies in data base management. Longer-term improvements are expected in the death registration process, along with associated reporting. A contract has been awarded to Genesis. A timeline has been agreed upon and numerous planning and configuration meetings have taken place since mid-2005.

- Estimated Implementation: Spring 2007

Laboratory Information Management System (LIMS)
A contract has been awarded to StarLims to install and implement a new laboratory information management system. This is a direct purchase through the CDC/GSA. The new LIMS will improve internal controls and reporting and contribute toward PHIN compliance.

- Estimated Implementation: Environmental - March 2007; Clinical and Cytology - Oct 2007; NBS and Lab Certifications - May 2008

North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)
This CDC-funded pilot project did the initial work with N.C. hospital emergency departments to understand how information can be collected, stored, analyzed and shared appropriately. This work, done under contract with the UNC School of Medicine - Department of Emergency Medicine, was the basis for subsequent development of the North Carolina Bioterrorism and Emerging Infection Prevention System (NCBEIPS). The new system was created by the North Carolina Division of Public Health (NC DPH) in

Automation Report: Public Health Information Network

2004 to address the need for early event detection in North Carolina using a variety of secondary data sources. The name was changed from NC BEIPS to NC DETECT to indicate that the system can be used for a myriad of public health surveillance needs. Using NC DETECT, authorized users are currently able to view data from the North Carolina Emergency Department Database (NCEDD) and the Carolinas Poison Center. Data from the Pre-hospital Medical Information System (PreMIS), the Piedmont Wildlife Center, and the NCSU College of Veterinary Medicine Laboratories are in final testing and will soon be available for user analysis. NC DETECT analyzes these data sources with the Early Aberration Reporting System (EARS), a SAS-based software package developed by the Centers for Disease Control and Prevention.

- In production - 2005

North Carolina Hospital Emergency Surveillance System (NCHESS)

North Carolina Emergency Surveillance System (NCHESS) is a system to electronically collect, report, monitor, and investigate emergency department (ED) and hospital data in near-real time from all participating hospitals in North Carolina. Data from NCHESS will allow public health professionals to detect unusual trends and public health emergencies earlier than current reporting systems so that appropriate action can be initiated. This system has been developed in partnership with the North Carolina Hospital Association. NCHESS will allow hospitals to fully comply with the mandatory hospital reporting law effective January 1, 2005.

- Implemented 2005

North Carolina Electronic Disease Surveillance System (NC-EDSS)

NC-EDSS is the North Carolina version of the National Electronic Disease Surveillance System. It will allow local health departments, laboratories, hospitals, and individual providers to electronically notify the N.C. Division of Public Health whenever a case of a reportable disease or condition occurs in N.C. The system will assist health care providers in complying with existing N.C. disease reporting laws. The timeliness, reliability, and accuracy of reportable disease data in N.C. will improve significantly. NC-EDSS will be fully integrated with the state's Health Alert Network. A contract for the application has been awarded to Consilience.

- Estimated Implementation: TB Pilot - Sept 2006; Rollout begins March 2007

State of North Carolina • Michael F. Easley, Governor
Department of Health and Human Services
Carmen Hooker Odom, Secretary
Division of Public Health • Leah Devlin, State Health Director
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