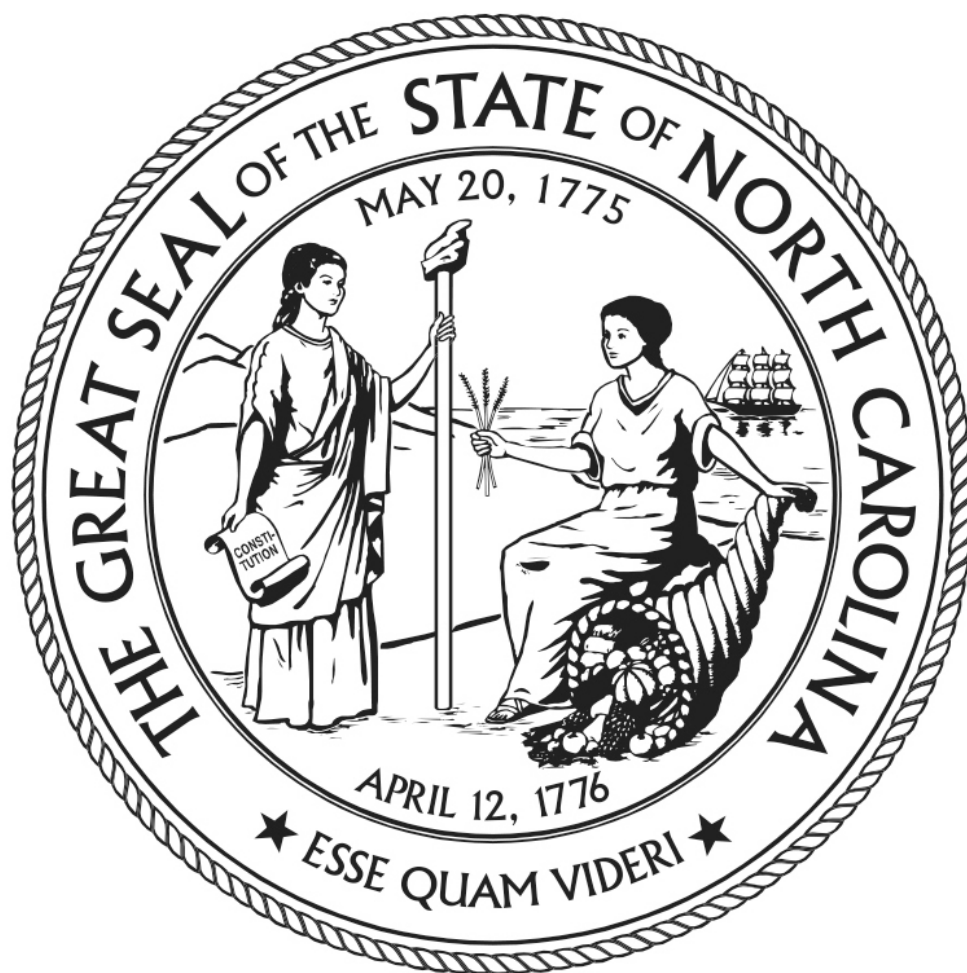


NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

State Health Director Annual Report to the North Carolina Medical Society and Commission for Public Health



OCTOBER 2022

**This report also serves as the Annual Report on the North Carolina Division of
Public Health Strategic Plan for Public Health Accreditation**

State of North Carolina

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NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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BACKGROUND

NC General Statute 130A-33. Commission for Public Health – Regular and special meetings.

NC General Statute 130A-33. Commission for Public Health – Regular and special meetings. Each year there shall be four regular meetings of the Commission for Public Health, one of which shall be held conjointly with a general session of the annual meeting of the North Carolina Medical Society. The State Health Director shall submit an annual report on public health at this meeting. The other three meetings shall be at such times and places as the chairman of the Commission shall designate. Special meetings of the Commission may be called by the chairman, or by a majority of the members of the Commission. (1973, c. 476, s. 127; 1989, c.727, ss. 175, 178; 1993, c. 513, s. 6; 2007-182, s. 2.).

NC Department of Health and Human Services (DHHS), Division of Public Health (DPH), and Dr. Elizabeth Tilson, State Health Director, are pleased to provide this report in fulfillment of this statutory requirement and to promote the connection of public health and clinical medicine.

INTRODUCTION AND EXECUTIVE SUMMARY

As we emerge from one of the largest global pandemics and public health threats in history, we have the opportunity to reflect on past work while looking to the future as we continue to improve our response to health challenges for the people of North Carolina and identify and prioritize the work necessary for recovery. As in the prior year’ report, we once again incorporate a lens of whole person health and equity.

America’s Health Rankings serves as an annual report for states built upon the World Health Organization’s definition of health. As evidenced by North Carolina’s improvement in the nationwide overall health ranking from last year’s rank of 41 to 34 for 2022, our work is making a positive impact, but we still have much work to do together.

Many health indicators on which North Carolina needs to improve are driven in part by North Carolina’s large uninsured population because we have not expanded Medicaid. The most important step we can take to improve health in North Carolina is expanding Medicaid, which would help hundreds of thousands of people access affordable health care.

This Annual Report to the North Carolina Medical Society and Commission for Public Health provides an opportunity to highlight some of the successes and lessons learned in our response to the COVID-19 pandemic and how those lessons learned are being applied to the Monkey Pox response.

The Annual Report also allows us the opportunity to look forward together and continue our collaborative work to improve the public’s health and wellbeing. In this work, we are guided by strategic plans that have identified priorities, goals, and strategies for improvement.

[Healthy North Carolina 2030: A Path Toward Health \(HNC 2030\)](#) lays out 21 ambitious, population-level 10-year goals and shared objectives for the entire state to solve “wicked problems” and improve the health of North Carolinians. The accompanying [2022 North Carolina State Health Improvement Plan](#) lays out additional details on the processes and strategies for improvement. We encourage

everyone to identify those Healthy North Carolina 2030 indicators your organization can adopt and become involved in the process.

The overarching goals for the NCDHHS are laid out in the NCDHHS's [2021-2023 Strategic Plan](#). This report dives deeper into the three priority focus areas for recovery: **Behavioral Health and Resilience, Child and Family Well-Being, and a Strong and Inclusive Workforce** and describes the overarching continued commitment to **Equity**.

The COVID-19 pandemic brought mainstream attention to public health across the globe and highlighted the challenges of a chronically underfunded patchwork of public health infrastructure to respond to the crisis. This report also highlights work to strengthen public health foundational capabilities, infrastructure, and workforce to be able to more readily respond to future threats.

Finally, this report also serves as the Annual Report on the North Carolina Division of Public Health Strategic Plan as required by Public Health Accreditation Board and highlights work done and progress made in other important public health areas including expanding NCCARE360, ending the HIV epidemic, addressing climate change and environmental justice, reducing tobacco use, decreasing infant and maternal mortality and disparities, testing for lead, and modernizing data systems.

AMERICA'S HEALTH RANKINGS

[America's Health Rankings](#) is an annual report for states built upon the World Health Organization's definition of health: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." The America's Health Rankings model includes four drivers of health: social and economic factors, physical environment, clinical care, and behaviors, all of which influence health outcomes. As evidenced by North Carolina's improvement in the nationwide overall health ranking from last year's rank of 41 to 34 for 2022, our work is making a positive impact, but we still have much work to do together.

Some of North Carolina's strengths, highlights and challenges for 2022 include:

Strengths

- Low percentage of low-care nursing home residents
- High prevalence of cancer screenings
- High flu vaccination rate
- Better ranking in comparison to other southern states for teen suicide rates among youths aged 15-19, with a rate of 8.9 per 100,000.

Challenges

- High prevalence of frequent physical distress
- Low percentage of four- or five-star nursing home beds
- High prevalence of smoking
- Drug deaths increased 85% from 3.4 to 6.3 deaths per 100,000 adults ages 65+ from 2008-2010 and 2018-2020

Highlights

- Full-mouth tooth extractions decreased 25% from 21.0% to 15.8% of adults ages 65+ from 2012-2020
- Flu vaccination increased 14% from 65.6% to 74.6% of adults ages 65+ from 2018-2020

For more information on North Carolina's ranking, please refer to the following link:

https://www.americashealthrankings.org/explore/senior/measure/outcomes_sr_3/state/NC

MEDICAID EXPANSION

Many health indicators on which North Carolina needs to improve are driven in part by North Carolina's large uninsured population because we have not expanded Medicaid. The most important step we can take to improve health in North Carolina is expanding Medicaid. Some benefits of the health of North Carolina's population with Medicaid expansion include:

- People who are able to get insurance because of Medicaid expansion are more likely to get regular checkups and less likely to skip medications because of cost. They're less likely to screen positive for depression. And they're less likely to die within one year of being diagnosed with end-stage kidney disease.
- Roughly 1 in 5 people in North Carolina will experience a mental illness. Yet, in 2020, **more than 55% of people** with such needs did not receive treatment, and the number one reason people went without treatment is cost. Medicaid expansion would allow access to treatment. In addition, the effects of mental illness and substance use disorder on factors such as employment, housing, criminal justice involvement, and social connectedness are well known. With Medicaid expansion providing more North Carolinians with health insurance, desperately needed wraparound services would no longer compete for these resources against clinical treatment. Those hundreds of millions of dollars would be immediately leveraged to make investments to improve employment, housing, social connections, and a focus on criminal justice. These aspects are all necessary for recovery and well-being.
- Medicaid expansion is also associated with decreases in poverty rates and food insecurity and increases in labor force participation and employment. When Michigan expanded Medicaid, they found that 69 percent of those who had jobs said they did better at work once they had health insurance through Medicaid expansion. Studies show that more people with disabilities and chronic disease are able to enter the workforce with Medicaid expansion.
- Medicaid expansion is associated with reduced rates of unintended pregnancy and decreased infant mortality and infant mortality disparities for Black infants.

COVID-19

For the most up-to-date information on COVID-19, please reference the following website:

<https://covid19.ncdhhs.gov/>

Preparation – In January 2020, we began preparing for what turned out to be one of the greatest, longest, and most intense global public health responses in recent history: COVID-19. Our early preparation and forward-thinking actions, including establishing a joint Emergency Management and DHHS command structure, began more than two months prior to the first confirmed case in North Carolina and laid the foundations for our focused, coordinated response.

Principles – Throughout the pandemic, we have remained grounded in our guiding principles:

- **Equity:** All North Carolinians have equitable access to PPE, testing, vaccines, therapeutics
- **Inclusivity:** Planning and response activities are inclusive; actively engaging state and local government, public and private partners; and drawing upon the experiences and expertise of leaders from historically marginalized populations
- **Transparency:** The transparent, accurate, and frequent public communication strategies we employ are essential to building trust
- **Data Driven Decision-Making:** Data is used to promote equity, track progress, and guide decision-making
- **Responsibility:** Appropriate stewardship of resources and continuous evaluation for improvement drive successful implementation

Capabilities – We built up robust capabilities and infrastructure in response to COVID-19, as shown in the graphic below:

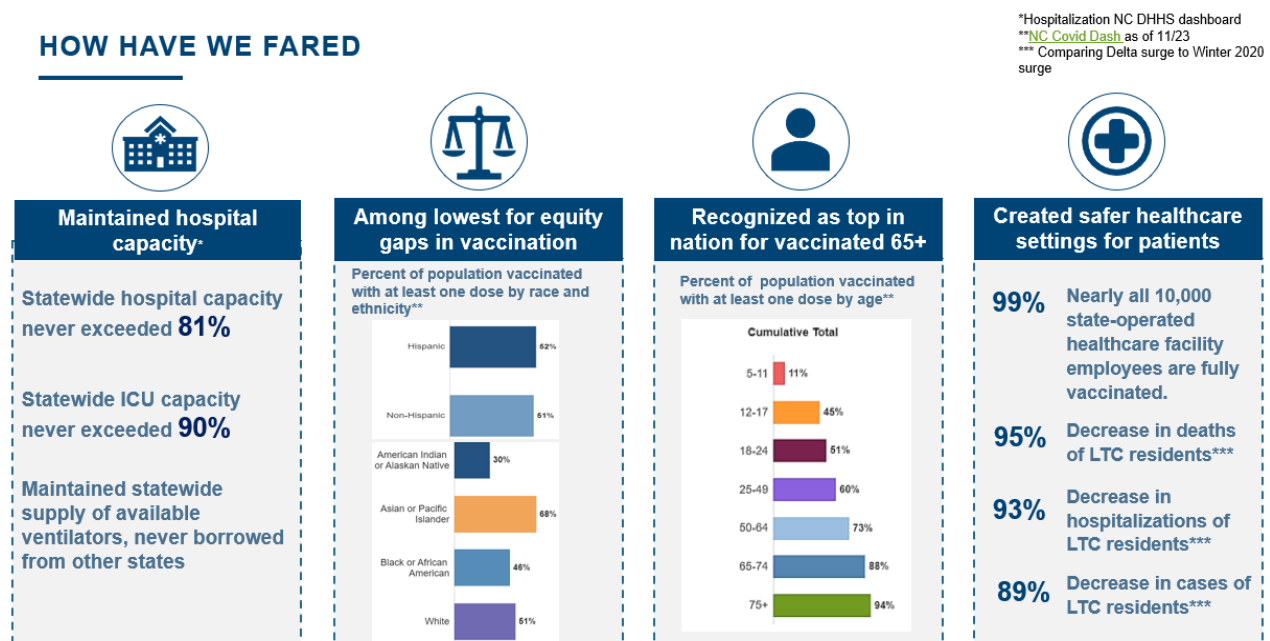
Built up Massive Capabilities

Mitigation/Prevention	Response			
Public education/messaging (3Ws) Phased approach to re-opening Guidances/Executive Orders Enforcement PPE purchase and distribution Vaccines (policy, IT infrastructure, operations) Treatment	Case-based containment			Surge Capacity
	Testing Infrastructure	Enhanced Case Investigation & Contact Tracing infrastructure, Slow COVID NC App	Isolation & Quarantine, Non-congregate shelter, Wrap around social services support	Data and Planning, Provider support, Policy and regulatory flexibilities
Data – Data driven approach; Reporting for hospitals, labs, public health; Public dashboards; Robust race and ethnicity data				
Communications - Public Communications Campaigns				
Health equity & historically marginalized populations - HMP workgroup, NCIOM Vaccine Advisory Group				
Partnerships - Local Health Departments, Local EMS, Health Systems, Primary Care/FQHCs, Professional Associations, AHEC, CCNC, CBOs, Faith Communities, and more!				
NORTH CAROLINA COMMUNITY RESPONSE DECEMBER 17, 2020				

Equity – We identified and overcame barriers to prioritize equity across our COVID-19 response:

- Existing inequities were worsened by the pandemic
- Early in the pandemic, disproportionate case burden, and testing and vaccine inequity were apparent
- People who historically lacked access to and trust in healthcare didn't believe they could access vaccines, testing and treatment
- Data – including robust race and ethnicity data – showed us where the gaps were, and guided how we worked to fill them
- We built on existing partnerships in the field, focusing on inclusive communications and community-specific outreach with trusted messengers
- We embedded equity and ease of access in operations (e.g., allocations, special populations match making, best practices)

Our results – As a result of this intense work, North Carolina fared well overall:








According to an August 2022 analysis that considered metrics such as community transmission, vaccine uptake, and COVID-19-attributable hospitalizations and deaths, North Carolina was ranked the **second safest state** in the nation during COVID-19. <https://wallethub.com/edu/safest-states-during-covid/86567>

As of September, 2022, Statista, which tracks [U.S. COVID death rate by state](#) places North Carolina among the 13 states with the lowest deaths per 100,000 people due to COVID-19.

Lessons learned as we prepare for future responses

Valuable lessons learned from the COVID-19 pandemic have now been leveraged to better respond to newer, emerging public health threats, like Monkey Pox. These lessons, some of which are delineated in the graphic below, will continue to serve as fundamental pillars of how to prepare for and respond to future health crises in the state.

KEY LESSONS LEARNED TO KEEP IN MIND FOR FUTURE RESPONSES

1	 Preparedness, teamwork and partnerships	<ul style="list-style-type: none"> ▶ Early preparedness helped response ▶ Pre-pandemic work was siloed, having more connection and better established relationships enables more efficient response ▶ Learning on teammates and encouraging creative problem solving was important when tackling novel issues ▶ Even in a fast pace response, workstreams need clear owners and reporting relationships to enable effective work ▶ State government can't do it alone – Partnerships are KEY
2	 Data system, modernization, completeness	<ul style="list-style-type: none"> ▶ Fragmented and incomplete data systems slowed response and left gaps in understanding who was impacted and who was receiving services ▶ Increasing capacity, modernizing data flows, integrating data streams, collecting granular demographic data revealed insights into populations, guided response, drove program activities, informed whole person care
3	 Transparent communication	<ul style="list-style-type: none"> ▶ Early, clear, and consistent communications is key to a successful public health effort and public trust ▶ Transparency and Honesty is important, always, but especially if you don't have all the answers and when information is evolving
4	 Equity	<ul style="list-style-type: none"> ▶ Needs to be intentional. Well worn paths are not always equitable. Think about new partners ▶ Access strategies need to consider that not everyone has access to a doctor or health care ▶ Success in reaching HMP communities relies on relationships and trust, partnerships move at the speed of trust (e.g., Healthier Together) ▶ Data is critical and it needs to be followed up with a thoughtful strategy that engages all stakeholder
5	 Simple policies and reduced operational barriers	<ul style="list-style-type: none"> ▶ Simplicity in guidance, prioritization, and policies enables response ▶ Lower barriers to care (e.g., transportation, language, accommodations) ▶ Bring care to people in community and trusted sites; tele-health ▶ Streamline operations from front to back ▶ No wrong door – online resources for techsavvy, phone or in-person help or others

Moving forward - Recently declining trends and changes in available tools have allowed a shift from emergency response to disease management. In light of this new phase of the pandemic, NCDHHS released [Moving Forward Together: The Next Phase of North Carolina's COVID-19 Pandemic Response](#). This report acknowledges that COVID-19 will remain with us, and we will learn to live with and manage it by remaining steadfast to the same core principles, listed in the graphic below, that we utilize for other public health threats:

>>> Core Principles

The following principles undergird North Carolina's plan for this next stage of pandemic.

- **Empowering Individuals.** As people seek to return to their normal routines, they will need to make informed decisions on how to best protect themselves and their families. While the pandemic is not over, with vaccines, boosters, and other tools at our disposal, in most instances individual decision-making and risk assessment is the appropriate path forward. We will no longer provide guidance for most settings, but instead focus on protecting those most vulnerable to serious illness.
- **Maintaining Health System Capacity.** NCDHHS will continue to coordinate with the health care community to preserve health care system capacity in the event of future surges. It is vital that healthcare providers meet the needs of those who have COVID-19 as well as anyone else needing care whether it be for cancer, heart disease, or an injury.
- **Collaborating with Local Partners.** A central tenet of NCDHHS's strategy has been to develop partnerships with local health departments, health care professionals, community leaders, businesses, advocacy groups and convenors, and a myriad of other local, state and federal entities that have been integral to North Carolina's COVID-19 response. We will continue to convene partners to support resilience and speed recovery.
- **Prioritizing Equity.** NCDHHS will continue to ensure equitable access to the information and tools people need to best protect against COVID-19. This work begins with our ongoing commitment to data transparency by race, ethnicity, gender, age, and geography and using that data to drive policy and action. In addition, North Carolina will continue to direct its resources – such as masks, tests, and education materials – to communities most at risk from COVID-19, including historically marginalized populations, people with disabilities, and older North Carolinians.

Presently, North Carolinians can get back to the places, people, and activities they love, but should take steps to lower their infection risk. To better protect themselves, people should:

1. Stay up to date on COVID-19 vaccines and boosters, including the new bivalent COVID-19 booster;
2. Have a supply of at home tests to use if they have symptoms;
3. Plan to find treatment if they test positive for COVID-19;
4. Increase ventilation and consider wearing a mask indoors for an extra layer of protection.

MONKEYPOX

Up to date information on monkeypox can be found at www.ncdhhs.gov/divisions/public-health/monkeypox






Despite still tackling COVID-19, North Carolina was prepared early for monkeypox. North Carolina had testing capabilities and had disseminated provider guidance well before the state's first case of monkeypox was identified on June 23, 2022. Although anyone can get monkeypox, nearly all monkeypox cases in North Carolina have been in men who have sex with men, which is consistent with findings from other jurisdictions nationally. Testing is widely available through commercial labs as well as the State Lab of Public Health, and anyone with symptoms consistent with monkeypox is encouraged to seek evaluation and testing. Vaccines are readily available to those at higher risk of infection to protect against monkeypox or to reduce disease severity.

Addressing disparities and advancing health equity is central to our response. Weekly, NCDHHS aggregates and publishes demographic data to garner strategic insights into who in North Carolina is most susceptible to monkeypox infections and which populations are driving vaccine uptake. In North Carolina, black men who have sex with men are being disproportionately affected by this infection but have lower rates of vaccinations than other groups. Despite 70% of statewide cases disproportionately occurring among Black men, only 27% of vaccines have been administered to this population in North Carolina. While this relative percentage of vaccine administration is too low, it is almost three times higher than national rates; only 10% of U.S. monkeypox vaccine doses have been administered to Black or African American individuals. In addition, data shows a high prevalence of monkeypox co-infection with HIV and other sexually transmitted infections.

Using this and other information, NCDHHS is working with local health departments and diverse community partners – including those serving LGTBQ and Black community members and HIV and other sexually transmitted infection providers – to promote vaccines, to encourage testing, and to identify and respond to every case of monkeypox.

Our monkeypox response has been bolstered by invaluable lessons learned from experiences during COVID-19:

UTILIZING SOME COVID LESSONS LEARNED WITH MONKEY POX RESPONSE

1	 Preparedness, teamwork and partnerships	<ul style="list-style-type: none"> ▶ Prepared with testing capability, labs capacity, provider guidance before first case; regional LHD vaccine sites established before initial vaccine doses in state; detailed response plan published within days of first vaccine doses delivered ▶ Communications and coordination with LHDs, health care providers, LGBTQ serving community based organizations
2	 Data	<ul style="list-style-type: none"> ▶ Collect and publish demographic data on cases, testing, vaccines include gender, age, race, ethnicity, and co-infections
3	 Equity	<ul style="list-style-type: none"> ▶ Released <u>equity analyses</u>, finding that while 70 percent of monkeypox cases in North Carolina were in Black men, less than a quarter of vaccines had gone to Black individuals; offered key actions we and our partners in North Carolina are taking to improve, ▶ Leveraged relationships with LGTBQ partners from HIV response and other HMP serving organizations, including those serving Black people, as trusted messengers ▶ Ensured geographic access ▶ Vaccine eligibility aligned with those most at risk of exposure and infection
4	 Transparent communication	<ul style="list-style-type: none"> ▶ Developed key messages ▶ Early and multi-venue communication campaign ▶ Town Halls, provider webinars ▶ Communication toolkit
5	 Reduce barriers to services	<ul style="list-style-type: none"> ▶ Simplify eligibility for vaccines ▶ Guidance on simplify operations – from making appointments, screening for eligibility, vaccine

LOOKING FORWARD

As we look forward to continuing work on improving the public’s health and wellbeing, we are guided by our lessons learned, prior work, and strategic plans that have identified priorities for improvement through a lens of equity and whole person health. To help develop the vision for public health in our state and improve the health and well-being of all people of North Carolina, we utilize the following collaboratively developed roadmaps to guide and measure our progress:

Healthy North Carolina 2030 – [Healthy North Carolina 2030: A Path Toward Health \(HNC 2030\)](#), released in 2020, lays out 21 ambitious, population-level goals and shared objectives for the entire state to solve “wicked problems” and improve the health of North Carolinians for this decade. It aims to mobilize and coordinate a broad array of private sector, public sector, and community organizations that can play a role in making North Carolinians healthier. HNC 2030 leverages the population health model to address drivers affecting health outcomes such as quality of life and life expectancy: social and economic factors, health behaviors, physical environment, and clinical care.

The North Carolina State Health Improvement Plan (NC SHIP) builds upon HNC 2030 to help create a unified strategy across multiple stakeholders to drive improvement in the indicators throughout the decade covered by HNC 2030. The NC SHIP documents are iterative, describe the process for improvement, and report on progress of any improvements.

The 2020 NC SHIP began to lay out the processes for addressing and offers a deeper dive into the HNC 2030 indicators. The recently released [2022 NC SHIP](#) provides an update, along with additional detail, on the strategies and processes being used to achieve improvements on the HNC 2030 indicators. This document includes the activities and the plan for the Community Council that

designs and drives the NC SHIP. Results-Based Accountability is the chosen methodology for driving improvement, and the web-based tool [Clear Impact Scorecard](#) will be used to track progress on indicators, along with a menu of suggested policies, programs, and partners that will help to move the needle forward. We encourage everyone to identify those Healthy North Carolina 2030 indicators your organization can adopt and become involved in the process through strategic planning. For more information, please contact the HNC 2030 Resource Center HNC2030@dhhs.nc.gov.

NCDHHS's Strategic Plan – The overarching goals for the NCDHHS are laid out in the NCDHHS's [2021-2023 Strategic Plan](#), which is grounded in the Department's values, driven by equity, rooted in our commitment to whole-person care, and responsive to the lessons learned during the COVID-19 response.

DHHS will further advance its mission to improve the health, safety, and wellbeing of all North Carolinians by working toward the following goals:

1. Advance health equity by reducing disparities in opportunity and outcomes for historically marginalized populations within DHHS and across the state.
2. Help North Carolinians end the pandemic, control the spread of COVID-19, recover stronger, and be prepared for future public health crises with an emphasis on initiatives serving those communities most impacted.
3. Build an innovative, coordinated, and whole-person – physical, mental, and social health-centered system that addresses both medical and non-medical drivers of health.
4. Turn the tide on North Carolina's opioid and substance use crisis.
5. Improve child and family well-being so that all children have the opportunity to develop to their full potential and thrive.
6. Support individuals with disabilities and older adults in leading safe, healthy and fulfilling lives.
7. Achieve operational excellence by living our values – belonging, joy, people-focused, proactive communication, stewardship, teamwork, and transparency.

NCDHHS Priorities for Recovery – As highlighted in the graphic below, NCDHHS has identified three priorities for recovery: 1) Behavioral Health and Resilience; 2) Child and Family Well-Being, and a 3) Strong and Inclusive Workforce.

NCDHHS Priorities for Recovery

*These priorities and our work across the department are grounded in **whole-person health**, driven by **equity**, and responsive to the lessons learned responding to the greatest health crisis in more than a generation.*

Behavioral Health & Resilience



We will offer services further upstream to build resiliency, invest in coordinated systems of care that **make mental health services easy to access** when and where they are needed and to **reduce the stigma** around accessing these services.

Child & Family Well-Being



We will work to ensure that North Carolina's children grow up safe, healthy and thriving in nurturing and resilient families and communities. **Investing in families and children's healthy development builds more resilient families, better educational outcomes and, in the long term, a stronger society.**

Strong & Inclusive Workforce



We will work to strengthen the **workforce that supports early learning, health and wellness by delivering services to North Carolina.** And we will take action to be an equitable workplace that lives its values and ensure that all people have the opportunity to be fully included members of their communities.

NCDHHS PRIORITIES | AUGUST 30, 2022

Within each of the three priorities, focus areas have been identified along with corresponding action items, which are detailed in the next section.

Behavioral Health and Resiliency

NCDHHS is committed to offering services further upstream to build resiliency, to investing in coordinated systems of care that make mental health services easy to access when and where they are needed, and to reducing the stigma around accessing these services.

- Promote Behavioral and Physical Health Care Integration
 - Increase Collaborative Care model in NC primary care
 - Launch Medicaid Managed Care Tailored Plan Care Management systemwide
 - Operationalize Certified Community Behavioral Health Clinics
- Address the Intersection of Behavioral Health and Justice Systems
 - Create community and jail-based capacity restoration in NC
 - Maintain and grow pre-arrest diversion and re-entry programs
- Increase Access to Crisis Services
 - Launch 988 launch and maintain >90% answer rate
 - Launch Suicide Action Plan
 - Launch Behavioral health Bed Registry and operationalize electronic referral

- Address Substance Use Disorders
 - Enable mobile Medication Assisted Treatment
 - Expand Collegiate Recovery Programs
 - Align State Substance Use Disorder Services to American Society of Addiction Medicine Criteria for levels of care
- Improve Behavioral Health Data Infrastructure
 - Implement comprehensive Emergency Department Behavioral Health hold data reporting
 - Implement Behavioral Health Syndromic Surveillance using emergency department data available via NC DETECT
 - Implement Electronic Health Records in our three state psychiatric hospitals

Child and Family Wellbeing

NCDHHS will work to ensure that North Carolina's children grow up safe, healthy, and thriving in nurturing and resilient families and communities. Investing in families and children's healthy development builds more resilient families, better educational outcomes and, in the long term, a stronger society.

NCDHHS announced in February 2022 the launch of the [Division of Child and Family Well-Being](#) to help achieve its vision for children who are healthy and who thrive in safe, stable, and nurturing families, schools and communities.

The new division brings together, under one roof, programs and staff operating across multiple department divisions that support the physical, behavioral and social needs of children. Programs moving under the new Division of Child and Family Well-Being include:

- Nutrition programs for children, families and seniors (e.g., Special Supplemental Nutrition Program for Women, Infants and Children/WIC; Food and Nutrition Services/SNAP; and the Child and Adult Care Food Program)
- Health-related programs and services for children (e.g., school health promotion; home visiting services; and programs for children and youth with special health care needs)
- School and community mental health services for children and youth (e.g., coordination with schools and services like System of Care that coordinate resources for children and families across multiple child service agencies)
- The Early Intervention/Infant-Toddler Program, which provides supports and services to young children with developmental delays or established conditions.

The establishment of the Division of Child and Family Well-Being is a component of the Department's focus on the whole child. The COVID-19 pandemic placed immense stress on children and families, from health and economic implications to the consequences of isolation and the loss of usual childhood experiences. As North Carolina works to recover stronger, ensuring that families are supported and equipped with the tools they need remains a top priority. NCDHHS is addressing children's greatest needs stemming from the pandemic, including the following:

- **Child Behavioral Health** - During the pandemic, the rate of children in North Carolina discharged from an emergency department with a behavioral health condition increased by 70%. We are working to increase resources to support behavioral health in our schools,

including **evidence-based trainings** to help students, educators and families to recognize and address behavioral health issues. To increase transparency, accountability and equity, we are developing a **child behavioral health dashboard**. We are also working to implement the funded strategies and seeking additional resourcing for the initiatives identified by leaders across the state in the [Coordinated Action Plan](#) to address the needs of children with complex behavioral needs who come into the care of child welfare.

- **Child Welfare** - We are working to strengthen the services and supports available statewide for our most vulnerable children and families, with the aim of encouraging safe, stable, caring family relationships for all children. Recognizing the lasting effects of trauma and adverse childhood experiences, we are embedding **trauma-informed practices** into our child welfare work. We are updating the **child welfare information system** so teams caring for children have the data needed to improve transparency and outcomes. In partnership with NC Medicaid, we designed the [Children and Families Specialty Plan](#) to support access to healthcare that strengthens and stabilizes children, youth, and families involved with the child welfare system.
- **Nutrition Security for Children and Families** - Access to healthy, nutritious food is the foundation for health, learning and development. We are using innovative strategies to increase access to food supports, **including growing NCCARE360** with the addition of community-based organizations to connect families to resources. Using data and tailored outreach, we are working to increase the equitable **enrollment of eligible families in both WIC and Food and Nutrition Services** (SNAP). We are also developing a **statewide breastfeeding hotline** that will be available to any family in North Carolina.
- **Maternal and Infant Health** - Infant deaths accounted for 63% of all child deaths in 2020. Ensuring the health and well-being of children and families begins before birth, so we are **strengthening reproductive life planning** to equitably improve women's health and birth outcomes. We are working to reduce maternal and birth disparities by **advancing prenatal and perinatal services**, including doula services and group prenatal care, as well as ensuring the **appropriate level of care for newborns and pregnant people**. We are also leveraging Medicaid funding to support **evidence-based home visiting and parenting education** services in the [Healthy Opportunities Pilots](#).

Strong & Inclusive Workforce

NCDHHS is committed toward working to strengthen the workforce that supports early learning, health and wellness by delivering services to North Carolina. We endeavor to be an equitable workplace that lives its values and ensures that all people have the opportunity to be fully included members of their communities.

Our priorities within this workforce priority center around the Caregiver workforce.

- **Caregivers for the Youngest Population** - Reinforce the pipeline for early childhood educators by increasing compensation, ensuring pay parity, and sustaining training with key strategies:
 - Child Care Stabilization Grants
 - NC Pre-K rate increases

- WAGES salary supplements
- Child Care Subsidy market rate increase and Bonus Program
- Teacher pipeline strategies
- Raise North Carolina
- Caregivers for Older Adults - Invest in our direct care workforce with key strategies:
 - Direct care worker wage Increases and bonuses
 - Direct care worker survey
 - Additional training investments
- Caregivers for Individuals with Disabilities or in Recovery - Support people with disabilities and those in recovery to live their lives as fully included members of the community with key strategies:
 - Vocational rehabilitation services
 - Caregiver career training for Vocational Rehabilitation clients at WorkSource East
 - Transition to Competitive Integrated Employment for individuals with Intellectual and Developmental Disabilities in segregated settings
 - Employment First state government internships
 - Individual placement and support-supported employment
- Caregivers for Communities – Public health - Strengthen North Carolina’s Public Health workforce and infrastructure with key strategies:
 - Create a robust and diverse pipeline for public health workforce, including internships, and a We are NC Public Health engagement campaign.
 - Implement training and workforce development opportunities to grow careers, and ensure the workforce is prepared for current and future public health challenges
 - Support models for sharing workforce between jurisdictions, including small LHDs and academic practice partnerships
 - Focus on staff retention through compensation, employee engagement, and modernizing roles.
- Caregivers for Communities – Community Health Workers - Establish infrastructure and sustainability model for Community Health Workers with key strategies:
 - Training and Certification
 - Clinical and Advanced Medical Home Integration
 - Medicaid Integration and Additional Funding
 - Evaluation and Convening
- Incorporation of Community Health Workers (CHWs) in Medicaid Managed Care - Caregivers for Children and Youth open to Child Welfare Services with key strategies:
 - Improve the child welfare workforce to better support children and families
 - Build NC's Practice Model incorporating the Practice Standards and utilizing Safety Organized Practice
 - Statewide Child Welfare Workforce Recruitment Campaign & Toolkit
 - Augmenting the onboarding training for staff new to child welfare and those returning to the child welfare workforce

CONTINUED COMMITMENT TO EQUITY

NCDHHS established the role of Chief Health Equity Officer in 2021 to lead the cross-departmental Health Equity Portfolio, which is inclusive of the Office of Diversity, Equity and Inclusion, the Office of Health Equity and the Office of Rural Health and intersects with the equity work across the other NCDHHS Divisions and external stakeholders.

INTERSECTION BETWEEN HEALTH EQUITY, WORKFORCE DEI AND STRONG AND INCLUSIVE WORKFORCE

Health Equity	Workforce Diversity, Equity, and Inclusion
Health equity requires reducing disparities in opportunity and outcomes for populations that have been historically, and are currently, marginalized within DHHS and across NC in order to result in fair odds for full health potential .	Workforce DEI and a Strong and Inclusive Workforce requires that everyone from all backgrounds and categories have a fair chance to reach their full potential at work and achieve successful outcomes.

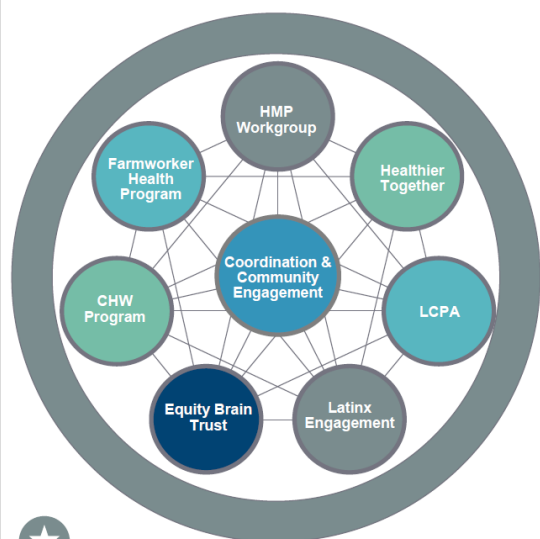
Racism & Other “Isms” are a Root Cause of the Inequities
<ul style="list-style-type: none">• CDC identifies racism as a fundamental driver of racial and ethnic health disparities and as a serious public health threat.• Discrimination and exclusion for all variables at the personal, interpersonal, cultural and institutional levels are the root causes of both health and workforce inequity.• The health & human services workforce can identify disparities and inequities and intervene to save lives.• Workforce DEI skills are essential for effective workforce intervention at all 4 levels to foster well-being and save lives.

Broad work areas of the Health Equity Portfolio include:

- Creating a **foundational Health Equity Framework**, integrating Health Equity across the Department, and developing an effective Health Equity Coordination and Governance Model
- Addressing **Equity in the Agency Priorities**
- Maintaining ongoing **communication and close engagement with key external individuals, partners and organizations** with expertise and strong ties to communities and their priorities
- Partnering with the NCDHHS Data Office to develop a department-wide **data framework** to collect and use data to hold ourselves and our partners accountable for equity.
 - As part of the commitment to data integrity to drive equity, in 2021, NCDHHS [joined approximately 40 cross-sector health care organizations](#) and signed a Health Equity Pledge, committing to using and sharing high-level data about race, ethnicity, language, and gender to inform best practices to promote health equity. NCDHHS was the first government agency to sign on to the pledge. The pledge was organized by the Health Evolution Forum which has been convening organizations over the past year to agree on a consistent set of measures and an approach to collecting, stratifying and analyzing health disparities data.

Health Equity Portfolio Programmatic Capabilities

CAPABILITY OVERVIEW



The capabilities part of a larger effort to integrate equity work across portfolio. By working in partnership, we can increase our capacity, embed best practices and strengthen our community impact

HMP Workgroup: Started in early 2020, the HMP Workgroup was formed to advise, inform and assist COVID-19 prevention and response efforts with a focus on driving equity, reducing disparities and improving outcomes for HMPs.

Healthier Together (HT): Started in Spring of 2021, the Healthier Together Initiative is a public-private partnership with NC Counts, a 501(3) organization to increase the number of individuals who are from historically marginalized populations receiving COVID-19 vaccinations

LCPA: Stemming from the need for increased language, communications and physical access, the LCPA workgroup was formed in August of 2021 to advise COVID-19 LCPA efforts and to create/manage a process for providing interpretation services at COVID-19 events for the HT, Farmworker Health Program, and CHW program

Latinx Engagement: Drives strategic and operational efforts aimed at reducing COVID-related disparities and improving outcomes for HMP communities—stakeholder engagement, outreach/promotion in partnership with Communications team, dedicated review of resources translated in Spanish, etc.

Equity Brain Trust: An internal-stakeholder meeting that was formed in Fall 2021 to establish a bi-weekly forum for NCDHHS stakeholders to discuss and obtain inclusive feedback on key COVID-19 equity efforts

CHW Program: CHWs are frontline public health workers who are trusted members of the community and serve as a liaison / intermediary between health/social services and the community

Farmworker Health Program: Matchmaking begins with and revolves around our local county teams to support and connect farm workers to vaccination events.

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The COVID-19 CDC Health Disparities Grant has enabled further equity work. Through this funding stream:

- Local Health Departments have received funding to build capacity, develop or expand Health Equity Advisory Committees, and deliver staff training to advance understanding and drive health equity work.
- The NCDHHS Office of Communications has expanded its COVID-19 related communications to reach underserved populations including Native American, Spanish-speaking, and people with disabilities.
- External partnerships have expanded, including:
 - Department of Transportation projects to reach Historically Marginalized Populations (HMPs) in North Carolina
 - UNC at Chapel Hill to address health disparities among incarcerated women
 - Center for Environmental Farming Systems to support the NC Local Food Council and community organizations in their efforts to expand healthy food access for communities across the state
 - NC Counts Coalition through the Healthier Together initiative to work with community-based organizations to close COVID-19 vaccine related equity gaps

STRENGTHENING FOUNDATIONAL CAPABILITIES FOR PUBLIC HEALTH

In the wake of one of the greatest health crisis and public health responses in more than a generation, directed efforts to strengthen our public health work force, foundational capabilities, and strategic planning are necessary and ongoing. A well-funded, well-prepared, and well-trained public health system is a necessity for keeping our communities healthy.

Public health workforce

The COVID-19 pandemic brought mainstream attention to public health across the globe and highlighted the challenges of a chronically underfunded patchwork of public health infrastructure to respond to the crisis. Additionally, from 2008 to 2017, public health lost at least 40,000 job positions nationally, and retention of existing staff remains a challenge. According to NC data from 2021PH WINS (Public Health Workforce Interest and Needs Survey):

- 28% of NC DPH workers reported intent to leave in the next year
- 57% cite pay as a reason for leaving
- 33% of NC DPH workers report planning to retire in next 5 years; greater than national average of 20%
- 56% of public health workers nationally report at least one symptom of post-traumatic stress disorder, according to <https://www.bigcitieshealth.org/public-health-workers-suffering-stress-and-burnout>

Assuring an adequate public health infrastructure requires a workforce that can execute the basic capacities of a well-functioning public health system including surveillance and data analysis; partnership development and community mobilization; health communication and others.

The increased awareness of funding shortfalls and workforce needs, along with opportunities that have been identified to overcome disparities and advance equity, help to underscore the need for more investments in a public health system in the future.

In May of 2022, NCDPH released NC [Governmental Public Health: Workforce and Infrastructure Improvement in Action](#) to further raise awareness of the resultant challenges and strains stemming from public health underfunding and underinvestment throughout the state.

Further work is ongoing by the Division of Public Health to prioritize recruiting, retaining, developing, and diversifying the public health workforce of the future for North Carolina. The key initiatives below summarize some of the essential work underway by DPH

- **Launch an Internship Program with Historically Black Colleges and Universities (HBCUs) and other Institutions of Higher Education to create a pipeline of public health workers of the future**

This past year the Division of Public Health and the Office of Health Equity hosted 23 interns from 7 HBCUS and Minority Serving Institutions and continued to host applied epidemiology interns to provide early exposure to careers in governmental public health.

DPH is also sustaining the Centralized Intern Training program to provide a career pathway for students into environmental health positions.

- **Support efforts for the state public health workforce to be compensated at ranges competitive with the broader health job market**

The NC Office of State Human Resources has updated the classification and compensation system to ensure state government remains capable of recruiting and competing in the marketplace. The Division of Public Health and DHHS will ensure that workers including the state public health workforce is being compensated at these updated ranges to successfully recruit the next generation of public health leaders into government service.

- **Support models for sharing workforce between jurisdictions, including for smaller local health departments, and with academic health practitioners.**

Facilitate collaboration across counties and ensure capacity in key public health capabilities including community partnership development, data gathering and analysis, health equity, and other areas. DPH will work to design an academic-practice partnership to provide opportunities for students in the health professions to serve in governmental public health. This effort builds on regional public health workforce development initiatives underway.

- **Launch a *We Are Public Health* public campaign to share the value of public health to communities and recruit the next cohort of public health leaders.**

DPH has identified positions in public health that deliver high value services to communities but are difficult to recruit and retain including disease intervention specialists, autopsy technicians, laboratory technicians, and others. The *We are NC Public Health* public campaign will help raise awareness of these critical services that keep communities healthy while serving as a recruitment and engagement tool to highlight key opportunities and career paths within governmental public health.

- **Implement training and workforce development opportunities to ensure the workforce is prepared for current and future public health threats**

DPH has launched a collaboration with the North Carolina Institute for Public Health at UNC to assess and address training gaps within the DPH workforce as well as local health departments. For example, to respond to survey data that show half of NCDPH workforce identified budget and financial management training as a need, NCDPH is implementing the Building Expertise in Administration and Management (BEAM) online certification program.

- **Improve Workforce Experience through Dedicated Leadership and Engagement Initiatives**

DPH will dedicate staff to lead opportunities to improve employee engagement, satisfaction, and development. DPH will also build a management training program for supervisors and create dedicated support for the Diversity, Equity, and Inclusion Council within DPH. DPH will also create a new employee onboarding and mentorship program for new staff entering

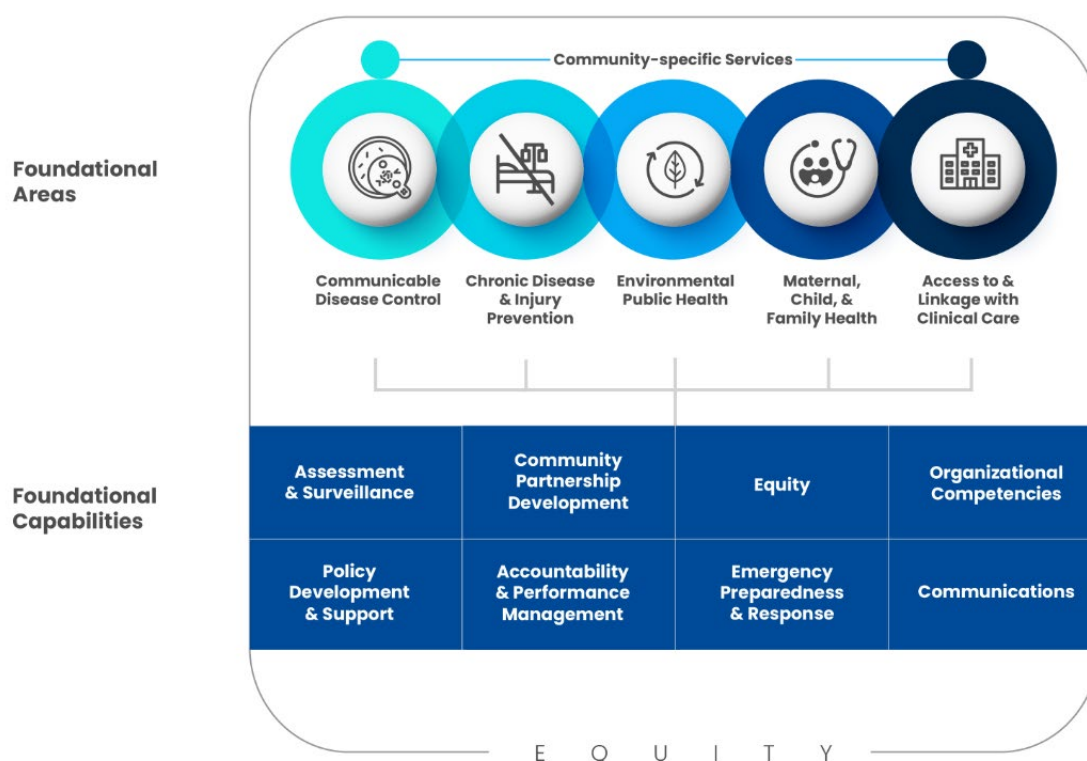
the workforce. DPH will measure improvement in employee workforce experience through objective measures pulled from annual workforce surveys.

- **Modernize workforce roles, including a new NC Credentialed Public Health Nurse program that aims to attract and retain a skilled, diverse public health nurse workforce at the local level.** Beginning with public health nurses, this effort will prioritize updating job classifications to meet today’s public health needs.

Foundational Public Health Services (FPHS)

The Public Health National Center for Innovation has developed a framework for governmental public health that outlines the minimum set of capabilities and services that must be available in every community. In 2022, the framework was updated to include equity as a foundational, cross-cutting skill and lens.

Foundational Public Health Services



Source: <https://phnci.org/uploads/body-images/Foundational-Public-Health-Services-2022.png>

The North Carolina Division of Public Health has adopted this framework as the basis for strengthening public health infrastructure for state and local COVID-19 response and recovery.

Chronic underfunding of core foundational governmental public health in North Carolina has forced an over-reliance on siloed federal funding streams. This approach has left critical public health functions understaffed – particularly in organizational competencies and accountability and performance management. Additionally, public health teams in the areas of HR, finance, and

operations are challenged to keep pace with day-to-day demands and have limited bandwidth and resources to innovate and modernize systems. The resources added by COVID-19 funding enabled an increase in much-needed staffing for functions such as communications, policy, strategy, and performance management related to COVID-19. An infusion of recurring funds to support foundational capabilities would allow public health to look beyond the urgency of the pandemic response and strengthen these enterprises across all areas; as COVID-19-specific federal funding tapers in the future, an infusion of funds would enable us to sustain the many advancements made during the pandemic.

As illustrated below, North Carolina ranks near the bottom, 45th nationally, on public health spending:



The forthcoming report from the North Carolina Institute of Medicine’s (NCIOM) Task Force on the Future of Local Public Health in North Carolina will develop a vision for the future of local public health in the state, with corresponding recommendations to achieve that vision. This report will include the principles of health equity, leadership, public communication about the value of public health, the connection between clinical services and population health, opportunities for targeted investments, and data integration to drive improvements in service delivery and outcomes.

NC DIVISION OF PUBLIC HEALTH STRATEGIC PLAN 2020 – 2022

In early 2020, at the precipice of the COVID-19 pandemic and prior to the development of the most recent overarching NCDHHS Strategic Plans and Priorities for Recovery, NC DPH launched a Public Health Strategic Plan to guide its work over the last two years and to align with requirements for accreditation with the [Public Health Accreditation Board \(PHAB\)](#). The Strategic Plan was developed in parallel with HNC 2030, and the priorities within each plan align with the NC State Health Improvement Plan. In addition, much of the work harmonizes with the NCDHHS’s strategic plan and priorities and will be in continual alignment going forward. In addition to the work already described, NC DPH has made further progress on advancing its Strategic Plan, to include:

Safeguard the Public’s Health

In addition to investigating and responding to public health threats, as noted in the Monkeypox and COVID-19 section above, the NC Division of Public Health has also worked to strengthen the provision of routine immunizations and has launched a tailored effort including partnering with NC Medicaid and Healthcare professional societies to provide children whose immunizations have

lagged with vaccinations. Beginning in 2020, North Carolina has seen a decrease in the number of cases of vaccine-preventable diseases, except for hepatitis A, which continues to be a large multi-state outbreak. We will be closely monitoring vaccine-preventable disease trends over the next year to see if the post-COVID decrease of most vaccine-preventable diseases continues, or if levels will return to, or exceed the levels seen pre-COVID.

Healthy People and Communities

- **NCCARE360** - NCCARE360 is the first statewide network that unites health care and human services organizations with a shared technology that enables a coordinated, community-oriented, person-centered approach for delivering care in North Carolina. Since the platform went live statewide in June 2020, the NCCARE360 public-private partnership team continues to focus on network health and capacity building, engagement, and support for health systems. NCCARE360 Health Equity Grants were awarded this year to Community-Based Organizations (CBOs) and Network Support Agencies (NSAs) in 19 counties in the Triad and Triangle to onboard CBOs or increase their use of NCCARE360 and to fund local hubs to provide meaningful technical assistance and create cross-sector partnerships to better address whole-person health. As of August 2022, over 101,000 people had been served through NCCARE360 with over 7,000 programs representing almost 3,000 organizations in-network.
- **HIV epidemic** - Ending the HIV epidemic remains a priority for NCDHHS. DPH continues to work with local health departments and other partners to implement our [Plan to End the HIV Epidemic](#), which addresses barriers to care such as transportation and stigma, and improved treatment and prevention services using the most current medical care with the goals of increasing the number of those virally suppressed and reduce the number of new infections. We have significantly increased our social media presence to raise awareness of HIV, PrEP and to reduce stigma, and are participating in a national pilot project to build a stigma reduction toolkit for agencies to utilize.
- **Oral Health** - While dentists embraced the use of tele-dentistry emergency appointments early in the pandemic, this practice has not continued. The dental profession shared healthcare's struggle to rebound from the impacts of COVID-19, and staffing issues abound in both the private practice and public dental health sectors. While the dental community has embraced public health principles of increasing access to care, the use of tele-dentistry has recently been declining from early pandemic levels.

The state's emphasis on virtual dental services aligns with hub-and-spoke models which use store-and-forward centralized patient evaluations with remote/mobile auxiliary dental teams rendering treatment. North Carolina [Session Law 2021-95](#) and subsequent changes to the Dental Practice Act reflect this new provider system, specifically the increased scope of practice for dental hygienists and regulations that outline how dental providers can implement tele-dentistry. Ideally, tele-dentistry will gain broader use in underserved community sites and help to address disparities in oral health.

- **Climate Change, Health, and Environmental Justice** - From 2010 to 2018, NC had the 4th largest population growth in the nation and our population is projected to continue to grow to 11.2 million by 2025. This rapid growth and development have resulted in populations living

near historically industrial and agricultural areas where an increasing number of people may be exposed to potentially harmful contaminants.

As our climate warms, we are seeing more short- and long-term health impacts on the residents of North Carolina. Due to pervasive systemic injustices, historically marginalized populations too often live in environments that jeopardize their health and well-being. For decades, the policies and pollutants that we now recognize as causing climate change, have been affecting communities of color, resulting in higher rates of asthma, heart disease, cancer, and other preventable diseases.

Focus on Environmental Justice Concerns

The NCDHHS Climate Resilience Workgroup, with leadership from the Occupational and Environmental Epidemiology Branch and the Office of Procurement, Contracts and Grants, elevates climate and health as a priority across the department. NCDHHS works alongside the NC Department of Environmental Quality and other state agencies on the NC Climate Change Interagency Council, to implement the [NC Climate Risk Assessment and Resilience Plan](#). Climate justice goals in this plan include addressing the disparate impacts of climate change, pollution, and toxic exposures on low-income communities and communities of color, as well as funding and implementing energy projects that provide equitable access to affordable clean energy for low-income earners.

Expanding Efforts to Mitigate Health Effects

In September 2021, the [DHHS Climate and Health Program](#), based in the Occupational and Environmental Epidemiology Branch, was awarded CDC funding to expand its 10-year program modeled on the CDC's Building Resilience Against Climate Effects (BRACE) framework. Previous funding has been used to address the health effects from heat and wildfires. The next cycle will build on this adaptation work while incorporating climate justice and a focus on the health effect from flooding around the state. Activities respond to [Executive Order No. 80](#), the NC Climate Risk Assessment and Resilience Plan, and extensive [literature](#) on the health effects of climate change.

Keeping the Public Informed

The Occupational and Environmental Epidemiology Branch of the Division of Public Health is developing an Environmental Health Data Dashboard (EHDD) that will allow users to view interactive maps and environmental health data visualizations at the state and county levels. The North Carolina EHDD will monitor and report environmental and climate hazards that can affect human health throughout the state. The purpose of this dashboard is as follows:

- Provide a central hub of environmental health (EH) and climate data to the public.
- Monitor Environmental Health and climate indicators over space and time.
- Map resources to strengthen community resilience against climate hazards such as hurricanes, flooding, wildfires, poor air quality, and extreme heat.
- Examine community characteristics and vulnerabilities that lead to inequitable exposures and disproportionate health outcomes.
- Report findings to partners through education and outreach.
- Collaborate with community, government, and research partners to interpret findings and inform actions that increase health equity.
- Tell NC-specific stories to promote environmental and climate justice through data visualization.

NORTH CAROLINA'S HEALTHIEST FUTURE GENERATION

Earlier in the report, we highlighted some of our progress under the Child and Family Well-Being Priority section. DPH has made additional progress on the following initiatives:

- **Tobacco use** -North Carolina's efforts to promote public health include an emphasis on reducing tobacco use in all populations, especially e-cigarette use and vaping in those age 21 and younger.

As required by SL 2021-180 Section 9G.10.(b), the Youth Electronic Nicotine Dependence Abatement Fund has been created within NCDHHS, Division of Public Health and is managed by the Tobacco Prevention and Control Branch in the Chronic Disease and Injury Section of the Division. Funds are being used on evidence-based tobacco use prevention and cessation, with an emphasis on reducing the e-cigarette epidemic among youth and young adults. This funding plan is focused on advancing health equity by identifying and eliminating commercial tobacco-product related inequities and disparities, primarily through policy, systems, and environmental change.

An Interagency Workgroup has been working on a plan to protect NC's young people from vaping and nicotine addiction and this plan has been endorsed by the legislatively appointed Justus-Warren Heart Disease and Stroke Prevention Task Force and is being supported by the NC Association of Local Health Directors.

A top recommendation from this Workgroup is that North Carolina raise the minimum age to purchase nicotine-containing products in the state from age 18 to 21 and establish a tobacco retailer permitting system to assist with tracking retailer compliance with this age requirement.

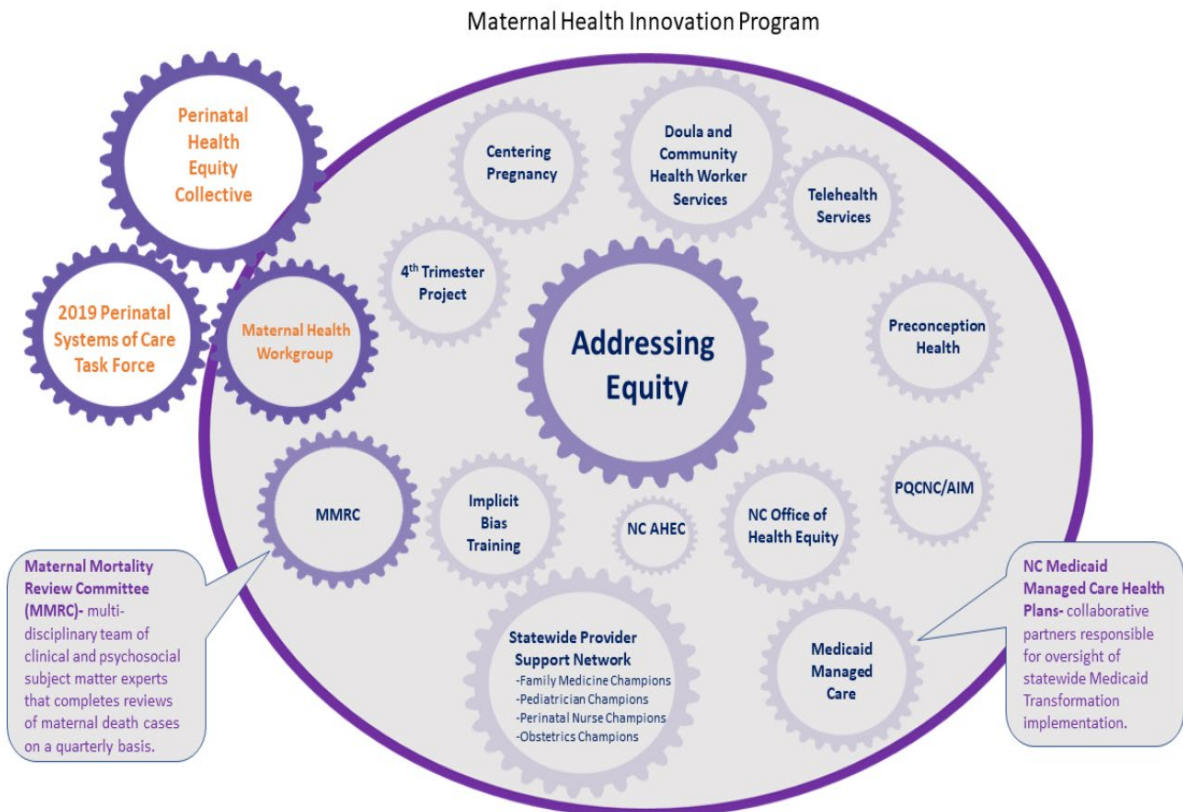
- **NC Perinatal Health Strategic Plan** - Initially launched in 2016, North Carolina released an updated version of the [NC Perinatal Health Strategic Plan \(PHSP\)](#) in 2022, which serves as a statewide guide to improve maternal and infant health and the health of all people of reproductive age. The plan's primary focus is on increasing health equity, which promotes the opportunity for every person to have good health regardless of social and economic factors.

The DPH brought together more than 100 stakeholders from across the state, currently known as the Perinatal Health Equity Collective, to develop this revised plan and will continue to work with public, nonprofit, private partners, along with individuals with lived experience, to implement the plan and assess progress. The PHSP includes three primary goals:

- 1) Addressing economic and social inequities,
- 2) Strengthening families and communities, and
- 3) Improving health care for all people of childbearing age

- **Maternal Health Innovation (MHI) Grant** - North Carolina is one of nine states to receive the Maternal Health Innovation (MHI) Grant from the Health Resources and Services

Administration (HRSA), which assists with supporting these efforts through a partnership with the NC Institute of Medicine. MHI seeks to augment and strengthen the state's perinatal system of care. Program efforts align with the [Perinatal Health Strategic Plan](#) and several recommendations from the [Perinatal Systems of Care Task Force](#) are being carried out. In collaboration with key partners noted in the diagram below, MHI works collaboratively alongside individuals with lived experiences, health systems, providers, the Maternal Mortality Review Committee (MMRC), prepaid health plans, and community-based programs to improve North Carolina's perinatal system of care, resulting in improvements in maternal health outcomes.



- Testing for Lead in Childcare Centers** - Since the adoption of a rule amendment in October 2019 requiring licensed childcare centers to test all drinking water faucets, DPH has successfully tested more than 24,000 water samples at more than 4,200 childcare centers. With US EPA WIIN grant funding, DPH contracted with RTI International to enroll, train and provide other wraparound services for licensed centers online. Sampling kits are mailed to each facility and once collected, samples are mailed back to RTI where they are analyzed. Results are posted online at www.cleanwaterforcarolinakids.org and available to the public. To date, just over 2% of all initial samples have been at elevated levels and nearly 500 problematic drinking water fountains and food preparation sinks have been addressed statewide. In April 2022, the US EPA indicated that the WIIN grant had tested more than 9,000 schools and child care facilities across the country since 2019. At that time, North Carolina had completed testing 4,058 child care centers, **accounting for approximately half of all the testing in the US.**

Plans are in process to expand this program using a similar model to public schools, with funding made available through the American Rescue Plan Act (ARPA). It is anticipated that as many as 300,000 water samples from 3,100 public schools will be tested over the next two years. Most importantly, the new ARPA funds provide resources to mitigate any water hazards identified through a combination of faucet replacement and filter installation.

IMPROVE ORGANIZATIONAL HEALTH WITH A FOCUS ON OUR PEOPLE

As highlighted in the graphic below, the public health workforce faces many challenges in retaining and attracting workers. With the loss of the public health workforce due to retirement and burnout from the pandemic, it is crucial that DPH attract new talent. Governmental public health must prioritize the development and support needs of employees and work to recruit and retain new graduates and professionals. To accomplish these goals, DPH is leveraging funding to strengthen foundational capabilities, maximizing regional expertise, and prioritizing attracting, retaining, and growing its workforce.



Supporting Recruitment, Development, Retention and Diversity of our Public Health Workforce

Recognizing public health workforce challenges, the following efforts are underway within DPH:

- The NCDHHS Strategic Plan commits to the creation of a framework for divisions to examine recruiting and retention practices and to conduct audits to inform strategies to increase salary equity.

- Leverage internship and fellowship programs to build career pipelines, including the North Carolina Partnership for Excellence in Applied Epidemiology for Infectious Disease, in partnership with UNC, and a paid HBCU and Minority-Serving Institutions (MSIs) Internship program to attract people of color into public health. DPH is in the process of building a program to support higher education, including community colleges, that have initiatives for careers in governmental public health.
- DPH is revising job descriptions and training modalities to attract and retain a skilled and diverse Public Health Nurse (PHN) workforce at the local level. The new NC Credentialed PHN program will focus directly on the new scope and standards of PHN through a competency-based learning approach with an emphasis on leadership, population health, and the NC public health system.
- DPH recently delegated additional authorities to Registered Environmental Health Specialists to improve efficiency and onboarding of new specialists by local health departments and migrated in-person training to virtual platforms.
- Working to earn trust by listening and lifting up the voices of our public health experts and combatting misinformation.

Expand and Strengthen Collaboration with Local Health Departments and Other Local, State, and Federal Partners

Solidifying a more robust LHD Liaison team following the successful COVID-19 vaccine program became a high priority for DPH. Federal ARPA Public Health Workforce funding allowed the addition of four staff to connect with local public health leaders, improve state/local communications and messaging, provide easy access for local health directors to reach DHHS for high-level issues, and to create a consistent bidirectional opportunity for DHHS to seek recommendations and input from local public health leaders.

- State and local public health coordinated regular meetings with local health department leaders and staff, including initiating a monthly meeting for LHD public information officers.
- Local health departments in NC are required to have a medical director. DPH worked with local health directors to create an email list-serve for the medical directors of local health departments, and to create training sessions at the 2022 Public Health Leaders Conference for this diverse group of critical local public health leaders.

USING DATA TO DRIVE DECISION-MAKING AND IMPROVE HEALTH

DPH is working to build a durable statewide infrastructure that supports foundational public health capabilities – particularly community partnership development, advancing health equity, and data infrastructure. NCDPH's Data Modernization Initiative efforts include cross-cutting efforts to maximize approaches across the Division as well as a focused CDC-funded effort focused on Communicable Disease.

Some additional highlights of DPH's data modernization efforts are included in the graphic below:

Equity – using data to inform priorities and drive action – Efforts are underway to establish an HBCU Consortium that will inform and facilitate the development of a centralized health equity data initiative.

Integrating Data Sets – The COVID response team used a Master Patient Index (MPI) to bring together two sources of COVID data – the COVID-19 Vaccine Management System (CVMS) and North Carolina's COVID-19 Surveillance System (NC-COVID) to better understand vaccination rates among people testing positive for COVID-19.

Building customizable and accessible data dashboards – DPH is working to make North Carolina's existing communicable disease surveillance software (NC EDSS) more accessible by LHDs. DPH is recruiting and deploying regional epidemiologists to assist LHDs with NC EDSS data access, and NC EDSS and NC COVID (the covid-specific instance of NC EDSS) are being upgraded to offer additional communication and data-handling capacities.

Modernizing Vital Records – DPH is transitioning to a unified Vital Events Registration system for the state of North Carolina (NCDAVE) to lead to the more efficient processes of vital events, timelier issuance of records, and higher quality vital statistics data for NC public health.

Growing capacity in Results-Based Accountability™ – Increasing the capacity of public health professionals to use Results-Based Accountability™¹⁶ (RBA) is an important strategy to improve health outcomes and improve equity. DPH, the Foundation for Health Leadership & Innovation (FHLI), and NC Area Health Education Centers (AHEC) are collaborating to build a large cohort of RBA certified faculty and train DPH staff and the broader community. The North Carolina State Health Improvement Plan (SHIP) uses RBA and its web-based tool Clear Impact Scorecard to monitor progress on population indicators and program performance measures.

Strengthening Data Use to Drive Action – The NC State Health Improvement Plan (NC SHIP) and Healthy North Carolina 2030 (HNC 2030)¹⁷, and the Clear Impact scorecards that monitor progress use a population health framework. The SHIP is being revised using the 2020 plan as the foundation. DPH and FHLI opened the HNC 2030 Resource Center in March 2022. The Resource Center manages Scorecard School and provides assistance with accessing data sources for community health assessments.

In recognition of these efforts, North Carolina is pleased to have been selected by The Public Health National Center for Innovations (PHNCI), a division of the [Public Health Accreditation Board](#), as one of three innovator states to receive support to advance our data equity efforts in 2022-2023.

³ Source: www.americashealthrankings.org/explore/annual/measure/PH_funding/state/NC

⁷ Source: https://debeaumont.org/wp-content/uploads/dlm_uploads/2022/03/Stress-and-BurnoutBrief_final.pdf

⁸ Source: <https://debeaumont.org/news/2020/when-we-need-them-most-the-number-of-public-health-workers-continues-to-decline/>

⁹ Source: www.businessinsider.com/55000-plus-public-health-jobs-cut-after-2008-financialcrisis-2020-4

¹⁰ Source: <https://debeaumont.org/wp-content/uploads/2021/10/Staffing-Up-FINAL.pdf>