

Department of Health and Human Services

2022 Resilience Strategy Report



For decades, policies and pollutants that we now recognize as causing climate change have been wreaking havoc on historically marginalized communities, resulting in higher rates of asthma, heart disease, and other preventable diseases. At the Department of Health and Human Services (DHHS), we have continued to raise the alarm on the disparate health impacts of climate change; provide healthcare, resources, and support to those most affected; and work to create lasting systemic change.

The Department's focus during the past year has continued to be on responding to the COVID pandemic, where these same disproportionate impacts are evident and exacerbated by the higher prevalence of chronic diseases that increase the risk of serious illness in historically marginalized populations. DHHS has led its COVID-19 response with an intentional focus on health equity, thereby addressing the health impacts of environmental injustice and building a stronger framework for engaging with historically marginalized communities beyond the pandemic. We continue to build trust by engaging local leaders to guide our policies and practices, investing in partners on the ground, using culturally and linguistically appropriate strategies, and working to ensure contractors and other trusted partners look like the communities served.

Amidst the COVID pandemic, the Department continues to respond to and prepare for climate hazards of extreme heat, impaired air quality, and flooding. The 2020 North Carolina Climate Science Report projected that the main climate change threats for NC are, in order of likelihood, increases in sea level rise, increase in summer temperatures, changes in annual precipitation, increased hurricane intensity, severe drought, and inland flooding.

Some communities, such as those in the Sandhills Region of the state, are already experiencing the cumulative impacts of climate and social stressors, such as an increase in warmer night-time temperatures with inadequate access to cooling, and increasingly intense precipitation and repeated flooding incidents. Thus, while some actions are statewide, Bladen, Hoke, Robeson, Sampson, and Scotland counties are prioritized for climate and health adaptations in heat-health alert systems and wildfire education through the Building Resilience Against Climate Effects program funded by the Centers for Disease Control and Prevention (CDC). These counties were prioritized due to a combination of complex hazards, health conditions, historical injustice, and historical resilience.

The activity chart below provides a list of the Department's complete, underway, and ongoing initiatives to help communities address these climate impacts and social stressors. Many initiatives in the chart have a "medium-term" or "long-term" expected completion date. The Department defines "medium term" as within 3 years and "long-term" as longer than 3 years.

Activity Chart

Activity	Status	Completion Date
<i>1.0. Critical Facilities</i>		
1.1. DHHS Facility Managers have been instructed to take several initiatives on their campuses to reduce energy and water usage when these opportunities are available.	Complete	Completed during 2021
1.2. DHHS has undertaken supportive measures to augment electrical services and to handle additional EV (ZEV) units as they come online.	Underway	Medium-Term
1.3. Teleworking continues.	Underway	Medium-Term
<i>2.0. Communication Networks</i>		
2.1. DHHS has continued its lead agency role with primary responsibility for the COVID-19 pandemic.	Underway	Long-Term
2.2. Continue to educate on benefits of additional support for DHHS programs below. <ul style="list-style-type: none"> • Building Resilience Against Climate Effects program • Back@Home program • Mold and moisture education • Health Equity staff 	Underway	Medium-Term
<i>3.0. Educational Campaigns</i>		
3.1. Continue Building Resilience Against Climate Effects grant climate and health adaptation work in the state through 2026.	Ongoing	Long-Term
3.2. Continue adaptation projects in heat-health and wildfire and expand work to incorporate impacts from flooding and climate injustice.	Ongoing	Long-Term
3.3. Developing a pilot Environmental Health Data Dashboard.	Ongoing	Long-Term
3.4. Provided interview on heat-health and NC farmworkers.	Complete	Fall 2021
3.5. Presented on the impact of climate on health.	Complete	April – November 2021
<i>4.0 Mission Critical Projects</i>		
4.1. DHHS continues to serve as the lead agency for the COVID-19 pandemic and uses a data driven approach to address the inequitable impacts we see from COVID-19, an approach that should also be applied to the state's climate change response.	Underway	Long-Term
4.2. DHHS created a Historically Marginalized Population workgroup during 2020 that has continued into 2022.	Underway	Long-Term
4.3. DHHS hired a Chief Health Equity Officer, the new Interagency Leadership Team representative, and pledged to support health equity.	Underway	Long-Term

4.4 DHHS' Office of Procurement, Contracts and Grants has reached out to virtually educate the vendor community in efforts to expand the Department's reach.	Ongoing	Long-Term
4.5 Helped to develop and disseminate EO 246 on climate and equity.	Underway	Long-Term
4.6 Continued conversations and work to build resilience in the context of addressing existing toxic exposures.	Underway	Long-Term
4.7 The Division of Health Benefits (DHB) continued to expand reimbursement for clinical services delivered via telehealth.	Underway	Medium-Term

Activity Progress

1.0. Critical Facilities

1.1. DHHS Facility Managers have been instructed to take several initiatives on their campuses to reduce energy and water usage when these opportunities are available. COMPLETE

These initiatives include the following:

- a. Consolidating building occupants in buildings with a high square foot per person so that buildings may be closed off and HVAC system temperatures set back or turned off completely.
- b. Recommissioning existing HVAC control systems to optimize energy savings. Verification of proper outdoor air set points on HVAC systems.
- c. Survey each campus for energy savings opportunities. Identify system leaks and repair them.
- d. Replace existing lighting (incandescent or fluorescent) with LED lighting.
- e. Install lighting occupancy sensors in appropriate areas/rooms.
- f. Implement temperature setbacks for non-occupied time periods for non-patient areas. Provide proper deadband between heating and cooling setpoints in all occupancies.
- g. Prohibit personal space heaters and mini refrigerators.
- h. Repair and caulk leaks in windows and doors. Add building insulation where needed or where it does not exist.
- i. Several projects have been completed or are in construction which help in the reduction of energy usage. These projects include the following:
 - i. At the majority of DHHS facilities, existing incandescent and fluorescent lighting fixtures have been replaced with LED fixtures.
 - ii. Broughton Hospital: Replacement of the domestic water heaters with semi-instantaneous water heaters.

- iii. J. Iverson Riddle Developmental Center: Replaced aging domestic water heater at the Mulberry Building with more efficient water heater.
- iv. J. Iverson Riddle Developmental Center: Reduced aging domestic water and sewer piping which has reduced water leakage.
- v. J. Iverson Riddle Developmental Center: Replaced an aging air-cooled chiller at the Birch Cottage serving three buildings with a more efficient chiller.
- vi. J. Iverson Riddle Developmental Center: Replaced the roof on the Maple Building including additional roof insulation.
- vii. John Umstead Campus: Replace the aging HVAC system including leaking steam piping in Building 27A with a new HVAC system.
- viii. Julian F. Keith ADATC: Upgraded Dorms 1 & 2 with new windows, new plumbing piping and fixtures new HVAC system upgraded electrical system including new LED lighting.
- ix. Julian F. Keith ADATC: Replaced aging condensing unit at the Activities/Gym Building.
- x. O’Berry NMTC: Upgraded the HVAC system serving the Administration Building and Human Resources Building.
- xi. O’Berry NMTC: Replaced windows at ELC-2 facilities.

1.2. DHHS has undertaken supportive measures to augment electrical services and to handle additional EV (ZEV) units as they come online. UNDERWAY

DHHS has undertaken supportive measures at DHHS allocations (state owned properties and leased properties) to augment electrical services to support EV (ZEV) vehicles in service and to handle additional EV (ZEV) units as they come online with DHHS.

1.3. Teleworking continues. UNDERWAY

Teleworking has continued to be part of the pandemic response, and this dramatically reduces earth warming pollutants. Building energy costs and vehicle miles traveled continue to be dramatically reduced. Furthermore, enabling remote works allows for more resilient service delivery regardless of what natural and climate disasters occur.

2.0. Communication Networks

2.1. DHHS has continued its lead agency role with primary responsibility for the COVID-19 pandemic. UNDERWAY

DHHS has continued to respond to disasters facing the State, addressing their impact and providing staff in a variety of public services. DHHS has continued its lead agency role with primary responsibility for the COVID-19 pandemic. This response has many parallels with the response to climate change, especially the need to keep equity at the center of all activities because of the

disproportionate impacts some communities experience. Involvement in this response also hinders our ability to pursue additional climate and health initiatives.

2.2. Continue to educate on benefits of additional support for DHHS programs UNDERWAY below.

- a. Building Resilience Against Climate Effects program – A CDC funded [climate and health](#) program focused on increasing resilience in southeast NC.
- b. Back@Home program - [Back@Home North Carolina](#) is a collaboration and partnership of state and local partners implementing a targeted rehousing program to serve a select high-needs population with no path out of the disaster shelters.
- c. Mold and moisture education – Recurring flooding and a humid climate result in ongoing consultations (approximately 1000 calls a year) with residents seeking guidance in addressing [mold and moisture](#) problems in their homes.
- d. Health Equity staff – Led by Victor Armstrong, the DHHS Chief Health Equity Officer, the Office of Health Equity represents DHHS on Governor Cooper’s Climate Change Interagency Council. Health equity staff can help to prioritize DHHS engagement in climate change from a health perspective, with an environmental justice focus.

3.0 Educational Campaigns

3.1. Continue Building Resilience Against Climate Effects grant climate and health adaptation work in the state through 2026. ONGOING

DHHS was awarded a \$2.5 million Building Resilience Against Climate Effects (BRACE) grant from CDC to continue climate and health adaptation work in the state through 2026. The BRACE framework is a five-step process that allows health officials to develop strategies and programs to help communities prepare for the health effects of climate change.

3.2. Continue adaptation projects in heat-health and wildfire and expand work to incorporate impacts from flooding and climate injustice. ONGOING

The Department is continuing Building Resilience Against Climate Effects (BRACE) adaptation projects in heat-health alert systems, heat-health surveillance, and wildfire elementary education in the Sandhills. The agency is also incorporating impacts from flooding and climate injustice.

3.3 Developing a pilot Environmental Health Data Dashboard. ONGOING

DHHS staff are developing a pilot Environmental Health Data Dashboard, based on the framework for CDC’s Environmental Public Health Tracking Network. The dashboard includes environmental exposure and health outcome data such as chemical releases, private well water, childhood lead poisoning, and carbon monoxide poisonings. It incorporates critical climate change indicators including flooding, air quality and population demographics important to climate justice, such as race and socioeconomic status. Upon completion, this tool will be publicly accessible for communities to explore the numerous relationships among environment, communities, and health. Expected to launch in Summer 2022.

3.4 Provided interview on heat-health and NC farmworkers. COMPLETED

The Department provided an interview on heat-health and NC farmworkers for a NC News Service radio series on climate change.

3.5. Presented on the impact of climate on health. COMPLETED

In 2021, Department staff presented on the health impacts of climate change at the NC BREATHE Conference, the Southern Regional Area Health Education Center’s annual event, and the Southeast Climate Adaptation Science Center.

4.0 Mission Critical Projects

4.1. DHHS continues to serve as the lead agency for the COVID-19 pandemic and uses a data driven approach to address the inequitable impacts we see from COVID-19, an approach that should also be applied to the state’s climate change response. UNDERWAY

DHHS continues to serve as the lead agency for the COVID-19 pandemic and uses a data driven approach to address the inequitable impacts we see from COVID-19. Closing these disparity gaps is important to mitigating the impacts of climate change on our most vulnerable communities. DHHS continues to provide increased social and behavioral supports across communities during the COVID-19 response, and has provided unprecedented health guidance to protect a wide array of North Carolinians in the pandemic. These same supports should be applied to the statewide response to climate change, which also has disproportionate effects on historically marginalized populations.

4.2 DHHS created a Historically Marginalized Population workgroup during 2020 that has continued through 2021 and into 2022. UNDERWAY

This workgroup includes internal DHHS staff and contractors and external partners from community groups, advocacy organizations, health care providers and academic institutions. Underserved and Historically Marginalized Populations are bear a disproportionate impact of climate change.

4.3 DHHS hired a Chief Health Equity Officer, the new Interagency Leadership Team representative, and pledged to support health equity. UNDERWAY

DHHS pledged to support health equity by using and sharing high-level data about race, ethnicity, language, and gender to inform best practices to promote health equity, reporting race and ethnicity data for all COVID-19 vaccinations, and establishing accountability mechanisms to strategically address health disparities. This information and new hire are critical to the state’s success in helping communities address the impacts of climate change.

4.4 DHHS’ Office of Procurement, Contracts and Grants has reached out to virtually educate and inform the vendor community in efforts to expand the Department’s reach. ONGOING

DHHS' Office of Procurement, Contracts and Grants has reached out given the unique needs of the pandemic and its work to ensure vendors reflect the communities served, as well as to meet federal sustainability procurement standards:

- a. A virtual educational session on understanding contracting with the State of NC; and
- b. Virtual preproposal conferences to walk through the competitive solicitation document and offer attendees an opportunity to ask questions; and
- c. Begin drafting debriefing procedures and an implementation strategy to allow unsuccessful vendors to understand why its proposal was not selected for award.

This work makes the agency more prepared for delivering services during and after natural and climate disasters.

4.5. Helped to develop and disseminate EO 246 on climate and equity. UNDERWAY

DHHS worked with the Governor's Office to identify the need for specific health content for Executive Order 246 and craft language for a health clause in the preamble, Section 2, and Section 11. The document incorporates health, environmental justice, and equity considerations in Executive Orders 246, 80, and 218; directs each Cabinet agency to identify an environmental justice and equity lead and corresponding duties; and directs DHHS to increase state-wide understanding and awareness of the health impacts of climate change.

4.6. Continued conversations and work to build resilience in the context of addressing existing toxic exposures. UNDERWAY

Agency staff are addressing existing toxic exposures that may include hazardous waste in the environment near homes, especially in low-income communities and communities of color. These exposures would likely increase during many natural or climate disasters.

4.7. The Division of Health Benefits (DHB) continued to expand reimbursement for clinical services delivered via telehealth. UNDERWAY

Telehealth potentially reduces transportation burdens on patients accessing health care, making it easier for individuals to receive attention during natural and climate disasters.

Looking Ahead

The critical vulnerabilities to communities due to the impacts of COVID-19 are at the forefront of our work. Impacts to children, heat-related illness, wildland fires, and flooding continue to be among the most pressing vulnerabilities and impacts.

NC DHHS will make progress on the activities in this table above moving into 2022, and beyond. Top priorities will be:

1. Identifying General Service Administration sustainable procurement practices for DHHS, while complying with findings from the North Carolina Climate Science Report and all statutes and applicable policies and procedures

2. Ensuring Health Equity Officer representation and consultation in the State's Interagency Resilience Team efforts
3. Implementing the Governor's Executive Order on environmental justice and providing and environmental justice and equity lead who coordinates with the DHHS Office of Health Equity.
4. Engaging partners with climate and health data
5. Continuing climate and health adaptation work using the CDC BRACE Framework
6. Implementing the NC Clean Energy Plan
7. Implementing the NC Clean Transportation Plan and providing a DHHS representative to the advisory committee to bring a health and equity focus
8. Applying health equity lessons from the global COVID-19 pandemic to climate and health resilience work