



North Carolina Department of Public Safety

Emergency Management

Roy Cooper, Governor
Erik A. Hooks, Secretary

Michael A. Sprayberry, Executive Director

MEMORANDUM

TO: Chairs of the Joint Legislative Oversight Committee on Health and Human Services
Chairs of the Joint Legislative Oversight Committee on Justice and Public Safety

FROM: Michael A. Sprayberry, Executive Director *MAS*

RE: Strategic State Stockpile Report

DATE: July 17, 2020

SECTION 3C.1.(b) By July 1, 2020, the Division of Public Health (DPH) and the Division of Health Service Regulation (DHSR) within the Department of Health and Human Services, in conjunction with the North Carolina Division of Emergency Management within the Department of Public Safety, shall develop and submit to the Joint Legislative Oversight Committee on Health and Human Services and the Joint Legislative Oversight Committee on Justice and Public Safety a plan for creating and maintaining a Strategic State Stockpile of personal protective equipment (PPE) and testing supplies. It is the intent of the General Assembly that the Strategic State Stockpile would be accessible by both public and private acute care providers, first responders, health care providers, long-term care providers, and non-health care entities located within the State for the purposes of addressing the COVID-19 pandemic and future public health emergencies.

SECTION 3C.1.(c) The plan shall include at least all of the following components:

- (1) Recommendations about which agency will serve as the lead agency to oversee the Strategic State Stockpile described in this section, with (i) a description of the roles of DPH, DHSR, and the Division of Emergency Management and (ii) an explanation of how these entities will collaborate to create and maintain the Strategic State Stockpile.
- (2) Recommendations for improvements to the State's existing procurement, allocation, and distribution process for PPE.
- (3) Recommendations about what persons or entities should have access to the Strategic State Stockpile.
- (4) Recommendations on how to increase within the State the manufacture of PPE that meets CDC guidelines for infection control, including consideration of (i) incentives for in-State private manufacturers and vendors that agree to produce and make PPE available to the Strategic State Stockpile and (ii) the feasibility of Correction Enterprises producing PPE for the Strategic State Stockpile.

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- (5) Recommendations about procuring testing supplies that meet applicable federal standards.
- (6) Identification of available locations for maintaining the Strategic State Stockpile.
- (7) Recommendations about the source, type, quality, and quantity of PPE and testing supplies the State should maintain as part of the Strategic State Stockpile, including a process for ongoing evaluation by individuals with expertise in emergency response, infection control, and environmental safety.
- (8) A mechanism for managing the inventory of PPE and testing supplies purchased for the Strategic State Stockpile.
- (9) An estimated five-year budget, including nonrecurring and recurring costs, for creating and maintaining the Strategic State Stockpile.
- (10) Any other components deemed appropriate by DPH and DHSR, in conjunction with the Division of Emergency Management.

The remaining pages of this document outline the recommendations of the Strategic State Stockpile Working Group for each of the specific items noted in the above legislation. The Strategic State Stockpile Working Group consisted of representatives from the following agencies:

- a. North Carolina Department of Health and Human Services/Division of Health Service Regulation/Office of Emergency Medical Services,
- b. North Carolina Department of Health and Human Services/Division of Public Health,
- c. North Carolina Department of Public Safety/Division of Emergency Management

In addition to the above stated agencies, the Working Group utilized technical assistance and consultation from the following agencies:

- a. North Carolina Department of Public Safety/North Carolina National Guard
- b. North Carolina Department of Public Safety/State Highway Patrol
- c. North Carolina Healthcare Association
- d. North Carolina Senior Living Association
- e. North Carolina Healthcare Facilities Association
- f. North Carolina Medical Society

SECTION 3C.1.(c)(1)

Recommendation: The Department of Health and Human Services (DHHS)/Division of Health Service Regulation (DHSR)/ Office of EMS (OEMS) shall be the lead agency managing the strategic state stockpile.

The State Emergency Operations Plan (EOP) outlines coordination and collaboration for emergencies or incidents impacting the state. A state agency is identified to serve as the lead coordinating agency and a state agency is identified to service as the lead technical agency. Per the EOP, the Department of Public Safety will continue to serve as the lead agency for state coordination and the DHHS will continue to serve as the lead technical agency for public health and/or medical events.

DHHS will oversee procurement of stockpile supplies, warehousing, and logistical support, as well as provide internal monitoring and compliance.

DPS will maintain a collaborative role with DHHS during both daily operations and during response, to develop distribution priorities, provide logistical and procurement support, medical surge response, and recovery implementation.

SECTION 3C.1.(c)(2)

Recommendation: Existing State Procurement Manual standards and DHHS procurement processes and policies will continue to be utilized for the strategic state stockpile. DHHS has the experienced staff to ensure purchases meet the technical need of the end users.

Procurement timing should be staggered and vendor utilization should be diversified in order to generate a stockpile lifespan that maintains the usefulness of PPE and testing supplies.

North Carolina General Statute 143-64.03 should be amended to allow DHHS to distribute PPE stockpile items to governmental entities and non-profit agencies from the agency list below, such as first responders and hospitals, at 50% - 75% of actual costs. NCGS 143-64.03 should further be amended to allow DHHS to recover the revenue from the PPE sale to support the maintenance of the strategic state stockpile. This strategy would ensure rotation of the PPE, maintenance of a usable stockpile, and lower the overall costs to maintain the stockpile.

Stockpile allocation will be based on the prioritization schedule and agencies/organizations identified in the response to Section 3C.1.(c)(3) below.

Under the current response structure, submission of resource requests for PPE and necessary support are split between multiple systems and pathways. A single platform should be utilized for submission of resource requests, validation of the need by state technical lead (DHHS) and state lead coordinating agency (DPS), and filling of resource request as determined by DHHS and DPS Unified Command Group.

Distribution of supplies should be completed via commercial carrier to distribute requested supplies directly to the end user. The current response structure distributes supplies to a county-based central receiving and distribution point with a county-based agency responsible for logistical management and distribution to all end users. In the current response, this is not a sustainable strategy, places an

undue burden on a single local agency, overwhelms local jurisdictions, and delays the delivery to end user. The processes, economy of scale efficiencies, and cost reasonableness of distribution has been perfected by the commercial shipping industry and should be the primary option.

SECTION 3C.1.(c)(3)

Recommendation: Access to the state stockpile should be implemented with the below list. This should also guide prioritization of scarce resource allocation should that be needed.

The following planning assumptions were utilized in the development of this allocation schedule:

- a. Statewide Stay at Home Orders will be implemented to some level, and
- b. Non-essential or elective medical procedures will be canceled in healthcare settings.

Group 1

Acute Care:

- a. Hospitals with highest number of COVID-19 cases
- b. Hospitals with COVID-19 cases
- c. Hospitals with ICU/ECMO/Ventilator Capacity
- d. Hospitals
- e. Emergency Departments (including free-standing)
- f. 911-Emergency Medical Services
- g. Emergency Medical Services (providing critical care)
- h. Dialysis Centers

Long Term Care:

- a. Skilled Nursing Facilities with highest number of COVID-19 cases
- b. Skilled Nursing Facilities with COVID-19 cases
- c. Skilled Nursing Facilities
- d. Palliative & Hospice Providers caring for COVID-19 cases
- e. Home Health caring for COVID-19 cases
- f. ICFs (Intermediate Care Facilities) for Individuals with IDD with highest number of COVID-19 cases
- g. ICFs (Intermediate Care Facilities) for Individuals with IDD with COVID-19 cases
- h. ICFs (Intermediate Care Facilities) for Individuals with IDD
- i. Adult Care Homes with highest number of COVID-19 cases
- j. Adult Care Homes with confirmed COVID-19 cases
- k. Adult Care Homes
- l. Behavioral Health & Intellectual and Developmental Disabilities and Traumatic Brain Injury group homes with highest number of COVID-19 cases
- m. Behavioral Health, Intellectual and Developmental Disabilities, and Traumatic Brain Injury group homes with COVID-19 cases
- n. Behavioral Health & Intellectual and Developmental Disabilities and Traumatic Brain Injury group homes
- o. Shelters, Correctional Facilities, Dormitories, Unlicensed Residential Treatment Facilities etc. with COVID-19 cases

Group 2

First Responders:

- a. Law Enforcement
- b. Fire Departments
- c. National Guard
- d. Non-Emergency EMS Transport Agencies (not covered under Group 1)
- e. All medical transportation agencies
- f. Adult Protective Services & Child Protective Services

Public Health & Testing/Contact Tracing Initiatives:

- a. Public Health Departments
- b. Primary Care Providers
- c. Federally Qualified Health Centers
- d. Specialty Care Providers
- e. Urgent Care Centers
- f. Pharmacists
- g. Community Testing Sites

Other Healthcare Agencies:

- a. Palliative & Hospice Providers (not covered under Group 1)
- b. Home Health (not covered under Group 1)
- c. Healthcare workers and staff performing delegated health procedures in school settings
- d. All other healthcare providers

SECTION 3C.1.(c)(4)

Recommendation: Per Session Law, the state where feasible will prioritize the utilization of North Carolina-based vendors and manufacturers when purchasing personal protective equipment and supplies.

The North Carolina Chamber of Commerce is currently working with industry partners on this topic. They are examining a possible initiative to make North Carolina a national hub for durable PPE hoping to take the process from the grower to manufacturing to certification all within the State.

All procurements will be completed in compliance with 2 Code of Federal Regulations part 200 to ensure eligibility of federal reimbursement and compliance with federal procurement standards.

Corrections Enterprises is a critical partner that has been utilized during this current pandemic to provide portions of the PPE needed, both internal for Corrections and for external State Emergency Response Team partners. They will be utilized where feasible, but both production capacity and technical capability are limited for major stockpile manufacturing.

SECTION 3C.1.(c)(5)

Recommendation: The State should purchase supplies that could be utilized regardless of pandemic or event type. This would consist of universal transport media, ultrafine flock swab 80mm individually wrapped, and biohazard specimen transport bags. These items meet federal standards and are currently being purchased by the State Laboratory of Public Health. Based on the testing data, it is estimated the stockpile should contain sufficient supplies to test 465,000 people each month or 1,395,000 tests over 90 days.

SECTION 3C.1.(c)(6)

Recommendation: The stockpile should be in a single, centralized location along the I-40/I-85 corridor to facilitate efficient transport to locations statewide. Ideally, this would be at a location in or near the Piedmont Triad. The warehouse should be a minimum of 64,000 square feet climate controlled with cost estimates between \$2.00 and \$6.50 per square foot annually.

SECTION 3C.1.(c)(7)

Recommendation: The Strategic State Stockpile should maintain a minimum 90-day supply level. Estimated costs are based on an average of the low and highs for purchases over the last 90 days. As national supply chains expand and contract, estimated costs will increase and/or decrease.

The estimated initial cost reflects a one-time upfront purchase of a 90-day supply of PPE and one year of warehousing, software, and staff operations.

Estimated annual recurring costs is calculated by rotating PPE at two-thirds of the shelf life with no revenues generated from sales or distribution of PPE and annual warehousing, software, and staff operations.

Critical Supply	90-day Supply	Estimated Item Cost	Estimated Initial Cost	Estimated Recurring Costs
Face Shields*	7,000,000	\$3.80	\$26,600,000	\$8,866,667
Gloves*	65,000,000	\$1.43	\$92,950,000	\$30,983,333
Gowns*	12,000,000	\$13.81	\$165,720,000	\$55,240,000
N95 Respirators*	4,000,000	\$5.05	\$20,200,000	\$6,733,333
Procedural Masks*	6,000,000	\$1.59	\$9,540,000	\$3,180,000
Ventilators	750	\$18,271.19	\$13,703,392	\$4,567,798
Test Kits (generic)**	1,400,000	\$3.89	\$5,431,719	\$5,431,719

Critical Supply	90-day Supply	Estimated Item Cost	Estimated Initial Cost	Estimated Recurring Costs
All Hazards Emergency Response Supplies	6	\$175,000	\$1,050,000	
Leased Warehouse Storage		\$416,000 / year	\$416,000	\$416,000
Software		\$132,000 / year	\$132,000	\$132,000
Staff		\$500,000 / year	\$500,000	\$500,000
Total			\$336,243,111	\$116,050,850

**PPE has a five-year shelf life and should be rotated and replaced at two-thirds life expectancy.*

***Transport media has an 18-month shelf life and should be rotated and replaced at two-thirds life expectancy.*

Subject matter experts from the Office of EMS, Division of Public Health, and state healthcare organizations would be consulted on initial vetting, testing, and procurement of PPE and supplies. The Division of Public Health will provide staff to consult on supply testing and evaluation, infection prevention, infection control, and environmental safety.

SECTION 3C.1.(c)(8)

Recommendation: Personnel should be hired within the Office of EMS to manage the centralized stockpile and to be responsible for warehouse management, inventory control, receiving, and distribution.

The Office of EMS will utilize a single software platform commercially available to perform the above functions that can interface with DHHS procurement and DPS crisis management systems. Market research of available software platforms provides an estimate of \$132,000 annually or \$660,000 for five (5) years. DHHS will procure an acceptable platform in accordance with the State Procurement Manual.

Non-PPE items, such as ventilators, shall be leased or purchased with required biomedical maintenance contracts, and five-year replacement plans.

SECTION 3C.1.(c)(9)

Recommendation: Below are the two recommended courses of action for development of a sustainable strategic state stockpile.

Course of Action 1 – Fast Build, Long Term Solution

This option has an estimated initial five-year budget of \$690,875,380 and invests a one-time \$336,243,111 for an initial purchase of one-hundred percent of the stockpile to ensure all materials are on hand. In Year 2, this option requires \$6,479,719 for warehouse, software, staff and testing kits, and then \$116,050,850 recurring annually beginning in Year 3 to maintain the stockpile for long-term future use.

There is greater cost to minimize the risk, as supplies are on hand rapidly and the stockpile will be available beyond five years.

Course of Action 2 – Multi-Year Build, Long Term Solution

This option has an estimated initial five-year budget of \$581,304,250 and builds the stockpile over a 3-year period, being incrementally funded, and maintains for long-term future use beginning at \$117,100,850 for the first year followed by \$116,050,850 recurring annually.

Both courses of action assume stockpile at two-thirds shelf life will be distributed to government partners and non-profits at no cost. Implementation of the previously identified North Carolina General Statute change allowing for distribution of PPE and supplies at 50 - 75 % cost would reduce the recurring costs to either \$58,025,425 (50%) or \$87,038,137 (75%).

SECTION 3C.1.(c)(10)

Recommendation: To support the all-hazards approach to preparedness and response, an all-hazards emergency response supply cache should be included in the stockpile that allows for response to severe weather—such as hurricanes or winter storms—civil disturbances, or technological hazards.

This PPE stockpile for public safety support would be managed by the North Carolina National Guard (NCNG) to support statewide response of the National Guard Reaction Force (NGRF) and related state public safety entities.

The additional equipment and supplies would augment existing public safety equipment and allow for a more effective response statewide. The cost would be a one-time allocation and equipment would be procured, maintained, transported, and distributed by the NCNG.