IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
Civil Action No. 4:20-81-D

BEREAN BAPTIST CHURCH,
RETURN AMERICA, INC.,
RONNIE BAITY, and
PEOPLE'S BAPTIST CHURCH, INC.,

Plaintiffs,

v.

ROY COOPER, in his official capacity as Governor of the State of North Carolina,

Defendant.

DECLARATION OF ELIZABETH TILSON

Elizabeth Tilson who, under penalty of perjury, states as follows:

1. I am over 18 years of age, legally competent to give this declaration and have personal knowledge of the facts set forth in it.

2. I am the Chief Medical Officer for the North Carolina Department of Health and Human Services (DHHS) and was appointed by Secretary Mandy Cohen to serve as State Health Director pursuant to G.S. 130A-3. I have served in these roles since August of 2017.

3. I practiced pediatric primary care for 23 years. I have been active in many local, state and national pediatric, public health and preventive medicine organizations, in which I have served in numerous leadership roles.

4. I have a bachelor's degree in biology from Dartmouth College, a Doctor of Medicine degree from Johns Hopkins University School of Medicine, and a Master of Public Health degree from the University of North Carolina at Chapel Hill. I completed residencies in Pediatrics and General Preventive Medicine-Public Health and am board certified in both fields.

5. In my roles as the State Health Director and DHHS Chief Medical Officer for the State of North Carolina, I protect the public's health and promote prevention activities, as well as provide guidance on a variety of issues.

6. I became aware of the COVID-19 virus in January 2020, through reports that China was experiencing an outbreak of a new virus that caused pneumonia-like illness. I have since followed the medical literature closely as knowledge about the virus has evolved.

The COVID-19 Pandemic

7. The virus that causes COVID-19 is spread mainly from person to person between people in close contact (within six feet) through respiratory droplets produced when an infected person coughs, sneezes, spits, talks or sings.

8. The virus can also spread through contact with surfaces contaminated by respiratory droplets if someone else touches that surface and then touches their own eyes, nose, or mouth—even if they never come into contact with the infected person.

9. People can be infected without symptoms and can therefore spread the disease without knowing that they are sick.

10. Although many people with COVID-19 experience mild or moderate symptoms, people over the age of 65 and people of any age with underlying health conditions are at greater risk of serious illness from COVID-19. These serious illnesses frequently require hospitalization, intensive care, and intrusive ventilation, and some may cause death.

11. Because of the speed with which COVID-19 spreads in a community, and the significant portion of COVID-19 patients who have needed hospitalization, intensive care, or intrusive ventilation, outbreaks have threatened to overwhelm healthcare systems. Recent experiences in Italy, Spain, and New York exemplify these challenges.

12. There is currently no proven treatment or cure for COVID-19. There is currently no vaccine to prevent infection with COVID-19.

13. As of May 14, in the United States, there are approximately 1,384,930 total cases, which have resulted in approximately 83,947 deaths. As of May 15 in North Carolina, there were approximately 17,129 laboratory-confirmed cases, which have resulted in 641 deaths. As of that same date, approximately 492 people are hospitalized in North Carolina.

Preventing the Transmission of COVID-19

14. There are a number of ways to prevent transmission of the virus and prevent severe disease resulting from infection with the virus.

- Limit the number of people who are in one place at the same time to decrease the chance of an infected person coming into contact with a non-infected person.
- Keep people six feet away from each other to decrease the chance that respiratory droplets will travel from person to person.
- Wear cloth face coverings to decrease the spread of respiratory droplets.
- Increase air circulation to decrease the spread of respiratory droplets.
- Limit the amount of time people are in close contact with one another.
- Enhance cleaning and disinfection to decrease the chance of a person touching a contaminated surface and carrying that contamination to that person's respiratory system.
- Limit the exposure of the virus for people with high risk of severe complications due to COVID-19.

The Relative Risk of Contracting and Spreading COVID-19 in Different Settings

15. Indoor activities generally carry a greater risk of contraction and transmission of the virus than outdoor activities for a number of reasons. First, it is more likely that outdoor environments will be more conducive to maintaining social distancing at least six feet apart, reducing population density, and avoiding contaminated surfaces. Second, air circulates freely outdoors, which decreases the risk of transmission of the virus. Studies have shown that the odds for disease transmission indoors is approximately 18.7 times higher than in an open-air environment. *See, e.g.*, Nishiura, Hiroshi, et al., *Closed environments facilitate secondary transmission of coronavirus disease 2019 (COVID-19)*, medRxiv 2020.02.28.20029272, *available at* https://doi.org/10.1101/2020.02.28.2002972. Another study examined 318 outbreaks (defined as three or more confirmed cases within a specific geographic area in a specific time). All identified outbreaks occurred in an indoor environment, confirming that sharing indoor spaces is a "major" cause of COVID-19 transmission and contraction. *See, e.g.*, Qian, Hua, et al., *Indoor transmission of SARS-CoV-2*, medRxiv 2020.04.04.20053058, *available at* https://doi.org/10.1101/2020.04.04.20053058.

16. Similarly, stationary activities (for example, where people are sitting or standing next to others for more than 10-20 minutes) generally carry a greater risk of contraction and transmission of the virus than activities in which people are moving (for example, walking on a trail or shopping in a store). Although while people are moving, they may come into contact with more people, the brevity of the contact decreases greatly the chance of transmission of the virus. Limiting the duration of contact with others is critical to lowering the likelihood of contraction and transmission of the virus.

Relative Risk of Activities and Settings

	Stationary	**Moving**

Indoor	High Risk (for example, sitting in a movie theater)	Moderate Risk (for example, shopping in a retail setting)
Outdoor	Moderate Risk (for example, sitting at an event in an outdoor setting)	Lower risk (for example, walking on a park trail)

17. Finally, activities which require gatherings of people who are older or who have underlying chronic conditions generally carry a greater risk that the people attending these gatherings will have a more severe illness as a result of COVID-19 than activities which require gatherings of people who are at lower risk (for example, children).

18. Recent examples of large indoor group gatherings that resulted in widespread transmission and contraction of the virus demonstrate the high risk posed by these mass gatherings indoors. In early March, Biogen, a leader in biotechnology, held a conference attended by approximately 175 people. Approximately two weeks later, there were approximately 100 confirmed cases of COVID-19 stemming from that meeting. *See* Keown, Alex, *Approximately 100 COVID-19 Cases Stem from Biogen Meeting*, Biospace.com (Mar. 17, 2020), *available at* https://www.Wbiospace.com/article/approximately-100-covid-19-cases-stem-from-biogen-meeting/.

19. The data suggest that large-group worship tends to increase the risk of widespread transmission and contraction of the virus as well. In March, multiple coronavirus cases were linked to an indoor event on March 22 hosted by a Durham church. Johnson, Anna, *Durham, NC, church event linked to multiple confirmed coronavirus cases*, The News & Observer (Mar. 30, 2020), *available at* https://www.newsobserver.com/news/coronavirus/article241619856.html. Across the country, in California, as of April 1, 2020, it was reported that nearly a third of

Sacramento County's coronavirus cases (100 out of 314) were linked to churches. Bizjak, Tony, Kasler, Dale, *Health alert: One-third of coronavirus cases in Sacramento County are connected to churches*, The Sacramento Bee (Apr. 1, 2020), *available at* https://www.sacbee.com/news/coronavirus/article241683631.html.

20. Finally, in a recent study, researchers found that, following a 2.5-hour choir practice attended by 61 people, only one of whom was symptomatic, there were 32 confirmed cases of COVID-19 and 20 probable secondary COVID-19 cases. Three of those patients were hospitalized, and two died. The researchers concluded that transmission was likely facilitated by close proximity (within six feet) during practice and amplified by the act of singing, which may have increased the emission and subsequent transmission of aerosols among the attendees. Hamner, Lea, et al., *High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice in Skagit County, Washington, March 2020*, Morbidity and Mortality Weekly Report (May 15, 2020), *available at* https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6919e6-H.pdf?deliveryName=USCDC_921-DM28169.

The Trends Since Implementation of Mass-Gathering Restrictions

21. The goal of community-mitigation strategies, for example instituting mass-gathering restrictions, is to flatten the curve – meaning slowing the rate of spread so a large number of people do not get sick at the same time and overwhelm our health care system, so people can get the medical care they may need. In the weeks since the Governor instituted the community mitigation strategies, North Carolina has been successful in flattening the curve. The percent of emergency department visits that are for COVID-like illness has been decreasing. The number of laboratory-confirmed COVID-19 cases has been increasing, but at an overall steady rate. In addition, the increased number of confirmed cases are in the context of increased testing

and the positive tests as a percent of total tests has been decreasing. The current number of people hospitalized has begun to plateau and there is availability of inpatient hospital beds and intensive care beds.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed this 15th day of May, 2020.

Elizabeth Tilson
Chief Medical Officer and State Health Director
North Carolina Department of Health and Human Services