

**Town and County of Nantucket  
Select Board • County Commissioners**

Dawn E. Hill Holdgate, Chair  
Jason Bridges  
Matt Fee  
Kristie L. Ferrantella  
Rita Higgins



16 Broad Street  
Nantucket, Massachusetts 02554

Telephone (508) 228-7255  
Facsimile (508) 228-7272  
www.nantucket-ma.gov

C. Elizabeth Gibson  
Town & County Manager

**AGENDA FOR THE MEETING OF THE  
SELECT BOARD  
MAY 21, 2020 - 11:00 AM  
REMOTE PARTICIPATION VIA ZOOM AND YOU TUBE  
PURSUANT TO GOVERNOR BAKER'S MARCH 12, 2020  
ORDER REGARDING OPEN MEETING LAW  
NANTUCKET, MASSACHUSETTS**

**YOU TUBE LINK:**

<https://youtu.be/Euw5cThbnzQ>

- I. CALL TO ORDER***
- II. EMERGENCY JOINT MEETING WITH FINANCE COMMITTEE***
  1. Discussion Regarding Reserve Fund Transfer to Nantucket Cottage Hospital COVID-19 Testing Programs.
- III. ADJOURNMENT***

## **PCR Testing for COVID-19**

Polymerase Chain Reaction Testing (PCR) is the primary test used to detect if someone is actively infected with COVID-19 virus. This is the testing that Nantucket Cottage Hospital currently performs on symptomatic patients by collecting nasopharyngeal swabs in our drive through testing center. With more testing becoming available we are exploring the potential to broaden our criteria beyond symptomatic patients very soon. The value of this testing is that it can discover individuals that currently have the virus even if they don't have symptoms. This can lead to patient isolation and contact tracing to see who else the virus may have spread to. This is the most effective way short of a vaccine or medication to slow or eliminate the spread of the virus.

PCR testing individuals who do not have symptoms do not meet current medical necessity criteria within the Mass General Brigham for testing, but we recognize that as the island's only institutional healthcare provider we have a role to play in meeting this public health need. A down side of PCR testing is that it is time consuming to collect and analyze specimens and the tests themselves are expensive. For people without symptoms or known direct exposure to COVID-19, testing is not necessarily covered by commercial insurance or Medicare. We are seeking both public grants and private philanthropy to underwrite the expansion of PCR testing to include asymptomatic patients.

We envision developing, along with the Town of Nantucket health department, a prioritization of cohorts who are most at risk of getting or spreading the virus – for instance, first responders, employees of high-volume essential businesses, daycare workers or home health aides – to be among the first tested. NCH will develop a process for scheduling testing through the current drive through testing center and entering physician orders for the testing. Results should be available in 24 to 48 hours. Positive results will require physician follow up and contact tracing through the health

department. Individuals with significant contact with a confirmed COVID-19 positive individual will be asked to quarantine and get tested as well.

It may also be possible to create an occupational health payment option for businesses who want their employees to be tested. This may make sense for businesses in hospitality and the trades and in any case where there is high-density employee housing.

As testing and/or funding becomes more available we can look to widen the circle. In certain high-priority cases it may make sense to test the same individuals at various times over the summer. If we discover a handful of asymptomatic carriers in high risk environments it will have a big impact in controlling the spread of COVID-19.



**NANTUCKET**  
**COTTAGE HOSPITAL**  
MASSACHUSETTS GENERAL HOSPITAL AFFILIATE

## **Proposal for Funding a Pilot Study**

### **Epidemiological and laboratory data collection for low COVID-19 prevalence community (Nantucket, MA) and high COVID-19 prevalence community (Hispanic Boston)**

#### **Principal/Overall Investigators:**

Rochelle P. Walensky, Massachusetts General Hospital, MD, MPH

Gary Shaw, CEO, Nantucket Cottage Hospital, FACHE

#### **SPECIFIC AIMS of this Pilot**

Nantucket: There is considerable uncertainty around the prevalence of COVID-19 cases in our small, geographically isolated community which has a confirmed case rate of only 0.06 % to 0.1 % as of May 1, 2020. This level of presumed disease prevalence is far below the national and regional average, even assuming a significant proportion of subclinical disease, and may be the result of our geographic isolation. However, our population doubles or even triples seasonally with the arrival of summer residents, visitors and workers from around the country and around the world, many of whom travel from areas we know have been heavily afflicted with the disease (e.g., Boston and New York). The impact of this seasonal surge in population on the prevalence of disease in our year-round population is likely to be significant, and very different from the spread seen in communities with stable populations such as Boston.

Boston: We have found a high proportion of Hispanic patients hospitalized at MGH for Covid-19. They are younger and are entering intensive care units at rates which are comparable to the older, non-Hispanic patients. The Massachusetts epidemic is characterized by an overrepresentation of patients from certain towns, such as Chelsea, MA which has the highest number of cases per 10,000 persons in the state and a large Hispanic population. A combination of high population density, large average household size, and a high proportion of essential workers (similar to Nantucket's multicultural socioeconomic demographics) may have contributed to community spread. A critical component of the effort to control Covid-19 in a community is increasing access to serologic testing to better understand the proportion of the population that has had asymptomatic or subclinical disease. While the degree of protective immunity against future infections remains to be fully understood, there has been some evidence of this from prior coronaviruses. Therefore, documenting rates of protection in a community can help improve our understanding of the community dynamics of the disease and guide efforts for

returning to work and reopening businesses. We need to increase testing capacity, ease economic and social hardships provoked by self-isolation, and fortify the public health infrastructure in the United States to improve equity. Increasing access to serologic testing in our neighborhoods suffering from a high burden of Covid-19 is a critical part of this effort.

The aims of this study are: (1) to collect blood from discarded samples in the lab for SARS-CoV2 serologic analysis prior to a rapid population influx; (2) to repeat this sampling every other week for the next six months, with the goal of understanding the impact of a rapid population influx on the spread of a highly communicable disease in a stable, isolated population; and (3) run a parallel study in a targeted community with a high incidence of COVID-19 for comparison of disease over time. This information would help inform community leaders and the local healthcare systems about the movement and impact of COVID-19 between areas of stable yet widely varying socioeconomic status, impact on high risk/isolated populations, guide public health policy decisions around relaxing or increasing public health policies, i.e., social distancing, business restrictions, school openings or closures, tourism impacts, recreation, and public health preparedness measures.

## **BACKGROUND AND SIGNIFICANCE**

It has become widely accepted that confirmed case levels of SARS-CoV2 under-estimate the true level of infection in a population. Seropositivity data are emerging which reveal much higher prevalence rates than expected, suggesting a large proportion of subclinical cases of COVID-19 infection. Strategies of quarantine, physical distancing, and masking have been widely adopted, and have reduced the spread of this highly communicable virus, but there is much to learn about the spread of this disease into a 'sero-naive' community, assuming that these strategies are being employed. The community of Nantucket is unusual in that it has a stable population of year-round residents with a very low confirmed COVID-19 case rate, is geographically isolated, and will very soon experience a large and sudden surge in population, diverse in age, socio-economic status and origin. The impact of this surge on a population with minimal immunity will be important to measure in a phased approach over the next months, in the event that public health decisions to mitigate this impact are indicated. In addition, it offers the opportunity to study the impact of a very transmissible disease on a stable population that invariably experiences a large level of tourism. The proposed study would involve using discarded blood specimens in the lab to test a random sample of the population to estimate 'baseline' sero-positivity, which we assume will be low, but may not be. The random de-identified testing will be done every other week for the next six months. We hope this information advances knowledge on the spread of SARS-CoV2 from shore communities into an island community with a low baseline level of immunity as a result of a rapid influx of a large and diverse population.

## **RESEARCH DESIGN AND METHODS**

This is a cross-sectional study that will be coordinated by researchers at Nantucket Cottage Hospital, the Massachusetts General Hospital, the Harvard T.H. Chan School of Public Health, and the Broad Institute. Additional coordinating staff at other institutions may be added by addendum. The study will initially aim to capture approximately 200 samples every other week

(2,400 in total) for the next six months. The samples will be sent to the Broad Institute for testing. Results will be recorded based on ordering provider, date collected and age ranges.

### **EXPECTED BENEFITS**

Understanding community-level seroprevalence of COVID-19 has clear benefits to the wider scientific and public health decision-makers, and for the local and global responses to the COVID-19 pandemic. These include but are not limited to: improved understanding of the proportion of SARS-CoV-2 infections that are asymptomatic or otherwise unreported and improved understanding of how varying socioeconomic status, household family structure, and social distancing behaviors influence risk of SARS-CoV-2 exposures. A low prevalence of disease in the community would mean a high risk for infection overwhelming the island, and, highly variable degrees of severity amongst those of varying socioeconomic class. Knowing the level of community immunity will help inform public health policy regarding preparedness and prevention strategies. Sampling over six months will document the change in island prevalence over the summer and into the fall. Duplicating the study in a community with a high prevalence of COVID-19 and varying socioeconomic class will provide additional insights into the spread of the disease and potential development of herd immunity. With that knowledge, communities can make informed decisions about reopening schools, businesses and public facilities.

### Estimated Pilot Project Budget

<b>Purpose:</b>	<b>Expense</b>
<b>Researcher</b>	<b>\$11,000</b>
<b>Study Writer</b>	<b>\$7,000</b>
<b>Lab Director/Study Design</b>	<b>\$40,000</b>
<b>Data Analyst</b>	<b>\$10,000</b>
<b>Bio Statistician</b>	<b>\$10,000</b>
<b>Research Coordinator</b>	<b>\$30,000</b>
<b>Supplies</b>	<b>\$15,000</b>
<b>Sample Processing - Broad</b>	<b>\$44,000</b>
<b>Shipping</b>	<b>\$5,000</b>
<b>Boston Co-culture Comparison</b>	<b>\$142,000</b>
<b>Total Budget</b>	<b>\$314,000</b>
<b>Community Foundation</b>	<b><u>\$52,200</u></b>
<b>Funding Needed</b>	<b>\$261,800</b>