

# Our State of Public Health: A narrative beyond the pandemic



On the morning of February 28, 2020, a day before the first confirmed COVID-19 case in Rhode Island, the Block Island Chamber of Commerce promoted the island's largest rental property as a destination for family vacations, retreats, reunions and weddings. Featuring 12 bedrooms and 11.5 bathrooms, Hygeia House was built during the Gilded Age and run by a doctor-cum-hotelier who used the building for a period to house his medical office. He promoted "a salubrious island getaway, where sea breezes, fresh water and clean air would restore health."

The name of the one-time hotel conjures an ancient character: Hygieia, the goddess of cleanliness and self-care in Greek and Roman myth. Today, her legacy lingers in language and in symbol, and not only on Block Island. In Athens, a shrine in her name sits within the Acropolis. In Rome, her statue stands with a wreath of laurel at the Trevi Fountain. In Providence, she kneels chiseled into the seal arched above the central window of the former home of the Rhode Island Medical Society, across from the State House.

Dr. Newell Warde, executive director of the Rhode Island Medical Society, said the symbolism of Hygieia could be seen as a shift from emphasizing treatment to prioritizing prevention and public health.

At a briefing on Capitol Hill that afternoon, Dr. Nicole Alexander-Scott, the director of the Rhode Island Department of Health, awaited the COVID test results of students and faculty from Saint Raphael Academy in Pawtucket who had returned from a winter break touring from Milan to Barcelona by way of the French Riviera. In the meantime, and in line with the World Health Organization, she encouraged the practice of good *hygiene* — advice harkening back to its namesake Hygieia and the art of health.

Since the first confirmed cases traced to the Pawtucket high school's European trip, COVID has infected at least one in seven Rhode Island residents. Of the more than 3 million dead worldwide, nearly 2,700 people locally have lost their lives. But statistics alone can't measure the physical and emotional tolls, and while no community has been spared, the distribution of suffering mirrors longstanding inequalities.

Sustained health inequalities, in terms of both access and outcomes, gave way to the language of "health equity" among policy makers. In 1990, U.S. Senator Claiborne Pell of Rhode Island co-sponsored Senator Barbara Mikulski's bill, the Women's Health Equity Act, to coordinate initiatives "relating to disease, disorders, or other health conditions that are unique to, more prevalent in, or more serious for women, or for which risk factors or interventions are different for women." The bill didn't move forward. In 1993, U.S. Senator John H. Chafee of Rhode Island proposed the Health Equity and Access Reform Today Act, shortened to the HEART Act, as a bipartisan proposal for universal health insurance. It, too, proved unsuccessful.

Across the Atlantic, England introduced a framework of Health Action Zones to spur investment in areas with high rates of "social exclusion." A US proposal to define similar Health Opportunity Zones across the country failed to gain enough support, but while it was under consideration the CDC collaborated with other federal agencies to convene its inaugural Weight of the Nation conference to minimize the health risks resulting from obesity rates. During opening remarks, Dr. Thomas R. Frieden, director of the Centers for Disease Control and Prevention (CDC), introduced a pyramid for understanding and improving public health. At the foundation of his framework, the most influential factors were socioeconomic: poverty, education, housing and inequality.

The "Health Impact Pyramid" model resonated with a representative in attendance from Rhode Island. And in 2012, the state health department's division of community, family health and equity introduced its own version. Three years later, with \$2.15 million in funding from the CDC, Rhode Island defined 10 urban and rural areas as Health Equity Zones (now 11), allowing nonprofits and local governments to qualify for financial support to develop "innovative approaches to preventing chronic diseases, improve birth outcomes and improve the social and environmental conditions of our neighborhoods."

Announced by the Rhode Island Department of Health two months before her confirmation as director, the responsibility for the implementation of Health Equity Zones fell to Alexander-Scott. Growing up in Brooklyn, Alexander-Scott witnessed neighborhoods with shifting demographics — and their influence on the state of public health. By the time Alexander-Scott turned 5, the borough's population had shrunk by 14%, losing more than 650,000 white residents and gaining 66,000 Black residents within the span of a decade.

Alexander-Scott attended St. Saviour High School, a Catholic all-girls college preparatory school in the neighborhood of Park Slope. She co-captained her varsity basketball team, played varsity volleyball, served in student government, and participated in math league, mock trial and the earth club. She made National Honor Society and the Société Honoraire de Français.

"I remember her at the altar," said Rita Draghi, an art teacher at St. Saviour. "She reminded me of a queen. At such a young age, she was so full of poise and confidence. I knew she would go far."

At Cornell University, Alexander-Scott majored in human development and family studies. On the Dean's List, she also worked for a summer in AIDS advocacy in the Bronx and witnessed the university grapple with the fifth on-campus suicide of a student in a span of four years. Following in her mother's

footsteps, who was a nurse, Alexander-Scott attended medical school at SUNY Upstate Medical University in Syracuse, an hour north of her alma mater. There, she received the James L. Potts Award in honor of a doctor who helped develop Upstate as one of the country's first programs to increase the opportunities for historically underrepresented students in the field of medicine. She began her residency at Stony Brook University Hospital on Long Island weeks before September 11, 2001.

Alexander-Scott arrived in Providence in 2005, during the city's hottest summer on record. A fellowship placed her for two years in the pediatric departments of the Alpert Medical School and at Hasbro Children's Hospital followed by a rotation in adult medicine at hospitals affiliated with Brown University. She traveled to Kenya and South Africa on medical missions, and moderated a conference on disparate healthcare issues for people of color in Rhode Island. Her first contribution to a medical journal detailed a local outbreak of an atypical form of bacterial pneumonia. Although the infection was found at school, she concluded "interrupting household transmission should be a priority during future outbreaks."

As Rhode Island's economy and employment buckled following the Great Recession, Alexander-Scott taught at Brown, served as a physician at multiple hospitals, and consulted with the Rhode Island Department of Health's division of community, family health and equity. She first stepped into the public eye when defending Rhode Island's shift in policy to move HIV testing from opt-in to opt-out. As a physician tending to infectious diseases, she witnessed the H1N1 swine flu pandemic. She also started her Master of Public Health degree at Brown.

"She always challenged me to look outside the medical room we were in and think about how we could best serve patients in their everyday environment," said Dr. Sando Ojukwu, an attending physician at the Children's Hospital of Philadelphia, whom Alexander-Scott mentored at Brown's Alpert Medical School.

In October 2014, Dr. Alexander-Scott provided public briefings on Ebola while then-director of the health department, Dr. Michael Fine, led the state's response, including addressing Rhode Island's Liberian community to ask for help in sharing health advice even as they worried and mourned for loved ones as the epidemic swelled in West Africa.

"Health is not possible without community," Fine said in a statement introducing Health Equity Zones.

When Alexander-Scott stepped into her role as director of the Rhode Island Department of Health in May 2015, she inherited a budget for the fiscal year of almost \$126 million and responsibility for nearly 500 full-time employees. Only 18% of the department's budget came from the general fund allocated by Rhode Island's elected officials. More than half came from federal government sources. Programs involving family and community health and equity accounted for 57% of the annual budget, an annual increase of 27%, broken out across health disparities, healthy homes and environments, chronic care and disease management, health promotion, preventative services, and perinatal and early childhood health.

A sold-out Health Equity Summit hosted more than 300 attendees representing "every aspect of the determinants of health," Alexander-Scott said in a video. In a *Providence Journal* op-ed, she championed the implementation of Health Equity Zones, writing "regardless of where we live, the costs of disparities are felt throughout our state." She cited racial, economic and educational gaps in health: Black infants in Rhode Island were twice as likely to die before their first birthday than white infants, and residents without a high school diploma were twice as likely to smoke cigarettes than college graduates.

“Your ZIP code should not determine your life expectancy,” Alexander-Scott told the Rhode Island Health Center Association annual meeting during her first year, repeating a refrain spoken by others before her.

A 2018 health department brochure highlighted examples of “immediate impact” in the communities designated as Health Equity Zones, including training in mental health first aid and suicide prevention in Washington County, the passage of a cigarette and vaping ban in Bristol’s town parks, and a “Walking School Bus” program to improve elementary school attendance in the Providence neighborhood of Olneyville. A 2019 factsheet credits the model with contributing to a 44% decrease in childhood lead poisoning in Pawtucket, a 24% decrease in teen pregnancy in Central Falls, and 46 people in West Warwick diverted from the criminal justice system to receive opioid treatment. Amidst the COVID pandemic, Health Equity Zones informed community testing, education and vaccination programs, including the distribution of 400,000 surgical masks. And for 2021, the health department solicited proposals from municipalities and organizations in 15 additional communities to establish new Health Equity Zones with grants starting at \$150,000 for infrastructure and \$50,000 for capacity building.

But not all tides have lifted in the Ocean State. Since 1995, the percentage of adults with diabetes grew from 4.6% to 10.8% — affecting those without a high school diploma three times more than those with a university degree. United Health Foundation placed Rhode Island as the least healthy state in the country in measures of housing and transit. The age of housing in Rhode Island left 31% of homes with the potential of elevated lead risk, the second highest after New York. In 2019, the health department found that only 20% of the physical spaces licensed for infant and toddler care met its definition of quality, with 18 of the state’s 39 municipalities altogether lacking any quality care.

Since Alexander-Scott’s column in *The Providence Journal*, the racial gap in infant mortality she cited has more than doubled: The latest state data found Black infants in Rhode Island were 4.2 times more likely to die in their first year of life than white infants. In response, the health department convened an advisory group. The educational gap in smoking rates also doubled: In 2019, 5.4% of Rhode Islanders with a college degree smoked while the number climbed to 21.9% among those who didn’t complete high school.

Despite a vision that “all people in Rhode Island will have the opportunity to live a safe and healthy life in a safe and healthy community,” even before COVID the health department noted that “for the first time in modern years the current generation of children may have a shorter life expectancy than their parents.”

The current pandemic revealed how better public health could minimize individual harm. A draft of the state’s vaccination rollout cited estimates that accounted for Rhode Islanders living with high blood pressure, 10% with asthma, 9% with diabetes and 6% with heart disease — conditions that could benefit from testing, data reporting and prevention efforts refined during COVID. In terms of health insurance, 4% were uninsured and 29% were underinsured, leaving a third of the state more likely to need guidance for preventative care.

Over the past year, reported rates of domestic violence, opioid deaths and substance abuse climbed. Even with vaccination progress, the virus and its variants will define the health landscape for years, with its long-term impact yet to be seen or measured in education, foster care and special needs programs.

The costs associated with managing the pandemic tripled the Rhode Island's Department of Health budget from \$193 million during the 2020 fiscal year, which covers July 2019 to June 2020. With a 2021 budget of \$642 million — 85% from federal funds and 63% allocated to COVID care — Alexander-Scott now manages an organization of more than 500 employees. (Note: Although that number seems large, it's 37% of Blue Cross Blue Shield of Rhode Island's 2020 revenue.)

In every crisis is a struggle for the narrative that lives on. As public officials and the general public have turned the pages following an uncertain plotline, there's a temptation to close the book on the pandemic altogether. But COVID is only a chapter that speaks to the past and the future of public health — of whose stories are remembered and whose suffering is remedied. With or without the sea breezes of salubrious island getaways, all communities need more than hygiene, clean water and fresh air. For too many still, even those foundations remain a myth.

"At the beginning of COVID everyone was linked together, but now it's about ourselves," said Ojukwu. "Until we can view others as part of us, that's what really pushes empathy and the change we need."