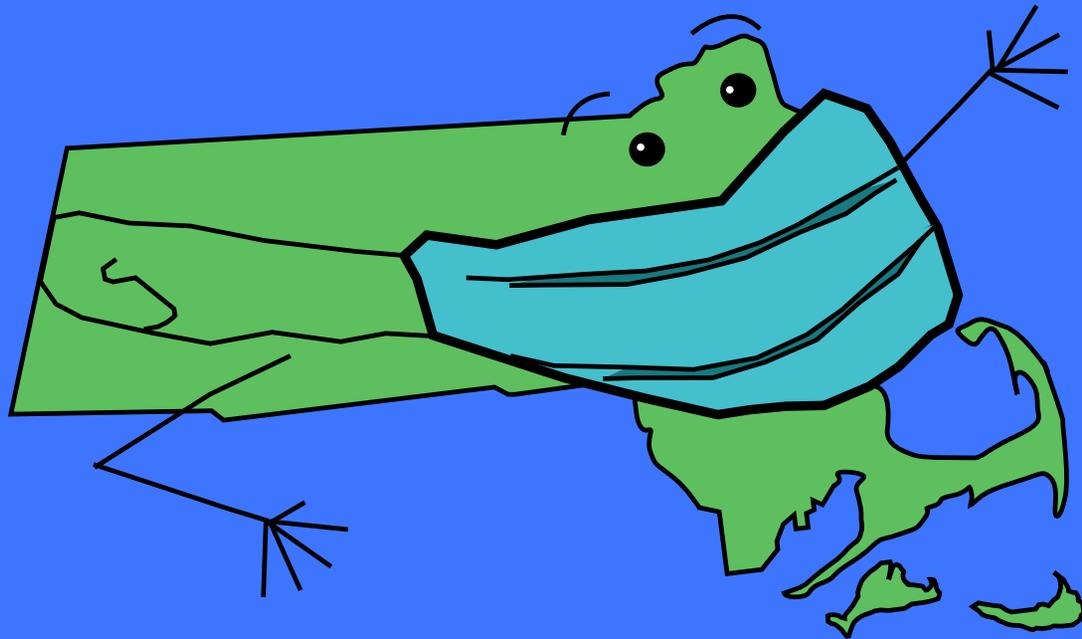


Welcome to Maskachusetts



The Spirit of America
and Wearing Masks



Cambridge
Public Health
Department



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MESSAGE

Chief Public Health Officer



DEAR FRIENDS,

As 2020 draws to a close, I reflect on the challenges we faced this year as a community, and at the Cambridge Public Health Department as public health professionals. The COVID-19 pandemic that arrived in our City in early spring upended “business as usual” as we responded to a virus that was little-understood, spread rapidly, and caused severe illness and death in some individuals. Beyond the health crisis that COVID-19 presented was the economic upheaval accompanying it,

resulting in job losses and financial strains for many individuals and families.

The pandemic exacerbated issues of health inequity, long a priority for our public health efforts. A disproportionate share of the burdens of COVID-19 has been borne by people of color in our community. Social determinants of health continue to drive inequities, with those living in crowded conditions or working in frontline service jobs more vulnerable to exposure to the virus. People of color and low-income individuals are also more likely to have the underlying health conditions that make them more susceptible to severe illness with COVID-19. We remain resolute in our work to mitigate these inequities.

I was pleased to be invited to serve on the COVID-19 Health Equity Advisory Group of the Massachusetts Department of Public Health. This advisory group generated recommendations for the Department on how to structure the pandemic response to prevent inequities and disproportionate negative outcomes for communities of color and immigrant communities.

I’m proud of the exceptional staff at the health department who rose to the occasion on every front as we addressed the hardships

of COVID-19. They worked tirelessly and passionately to protect the public’s health while continuing to address other programmatic priorities. The team demonstrated time and again why the Cambridge Public Health Department is nationally accredited, one of only three accredited local health departments in the Commonwealth.

Partnerships with City departments, healthcare providers, nonprofits and businesses strengthened our pandemic response. Cooperation from the public was critical in helping to contain the virus. The community came together to adopt safety measures and to care for our most vulnerable residents. I want to thank each of you for your contributions.

I would like to thank the City Manager as well as Dr. Sayah for their indefatigable support this past year. I have been energized by their example and resolve as seasoned public servants. I have great appreciation for the resilience and sacrifice of the Cambridge community as we continue to work together to keep one another safe and healthy.

A handwritten signature in black ink, appearing to read 'Claude A. Jacob'.

Claude A. Jacob
Chief Public Health Officer
Cambridge Health Alliance
City of Cambridge

MESSAGE

Public Health Commissioner



DEAR CAMBRIDGE COMMUNITY,

This year, unlike all other years, emphasized the importance of public health in protecting the health of our communities. While the 2020 COVID-19 pandemic strained our capacity, we have emerged stronger, more nimble, and more united than ever.

The Commissioner of Public Health has long held the authority to issue emergency orders to protect the public's health. Seldom, however, has there been the level of activity that we saw in 2020 in response

to COVID-19. Since the City announced a public health emergency on March 19, there have been numerous directives issued on topics so varied as temporary closures of private businesses, a moratorium on eviction enforcement, and wearing masks or face coverings in public. An April emergency order enabled the War Memorial Recreation Center at Cambridge Rindge and Latin School to be used for a temporary emergency shelter for homeless individuals, part of the overall effort to stop the spread of COVID-19.

As CEO of Cambridge Health Alliance, I had the privilege of overseeing an outstanding team providing patient care under stressful and uncertain conditions. Our Emergency Departments and acute/critical care services met the pandemic surge head-on, developing new care models and welcoming staff who were redeployed from sites across CHA. We continue to support our communities by providing clinical expertise and guidance, developing innovative models of care to support the health of our communities, including providing testing in the community, pivoting to telehealth to continue providing access to care by our patients, and addressing critical issues that impact health such as food security, all with the goal of keeping everyone safe and healthy.

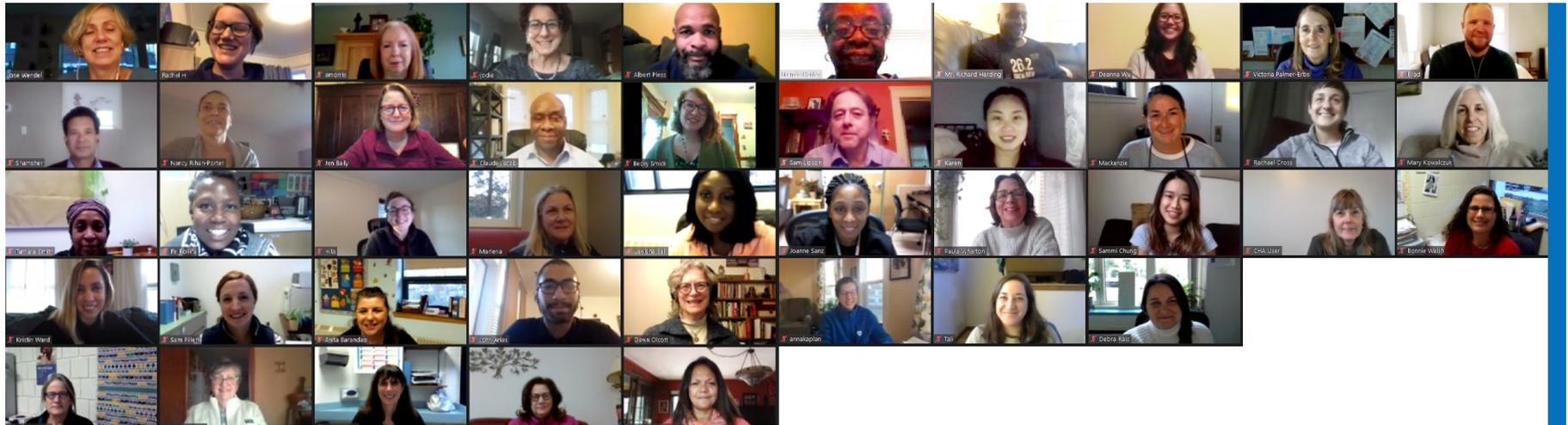
I was honored this year to serve as Co-Chair of the Massachusetts Health Equity Task Force related to COVID-19. This appointment gave CHA the opportunity to contribute to the critical work of advancing health equity in Massachusetts, particularly in communities of color that were disproportionately affected by COVID-19 – several of which are in CHA's service area. While the pandemic is still with us – and we are experiencing another surge in positive cases as of this writing – I am confident in our ability as a community to remain resilient and vigilant in mitigating the spread of COVID-19. A vaccine is now being distributed to healthcare personnel and vulnerable populations. We are at the ready.

Sincerely,

A handwritten signature in black ink, appearing to read "Assaad J. Sayah". The signature is fluid and cursive, written over a white background.

Assaad J. Sayah, MD
CEO, Cambridge Health Alliance
Commissioner of Public Health
City of Cambridge

Who We Are



PUBLIC HEALTH IS ABOUT PROTECTING THE HEALTH OF AN ENTIRE POPULATION. For us, that means all people who live, learn, work, or spend time in Cambridge. The Cambridge Public Health Department provides services, analyzes and shares information, implements policies, and enforces regulations in ways that support healthier lives and benefit everyone in our diverse community. We often work behind the scenes to protect the public's health, but the 2020 COVID-19 pandemic put our work front and center. While it's been an unusual year, improving quality of life is still what public health and Cambridge are all about.

VISION

The Cambridge Public Health Department is a leading, innovative, and model agency that facilitates optimal health and well-being for all who live, learn, work, and play in Cambridge.

MISSION

The Cambridge Public Health Department improves the quality of life for all who live, learn, work, and play in the city by preventing illness and injury; encouraging healthy behaviors; and ensuring safe and healthy environments.

VALUES

- Collaboration
- Innovation
- Professionalism and Excellence
- Social Justice and Equity

Public Health Overview: Functions and Historical Accomplishments



Public Health is the practice of preventing disease and promoting good health within groups of people, from small communities to entire countries.

American Public Health Association



At its most effective, much of public health's work is not visible to the average person. Public health efforts are integrated into the very fabric of the community whose health it seeks to protect. Since public health initiatives are largely focused on prevention, its greatest successes lie in the problems that didn't happen: the heart disease that never developed; the foodborne illness that didn't occur; the drug overdose that was averted.

COVID-19, the illness caused by SARS-CoV-2, altered the understated work of public health professionals in 2020. The global pandemic took the world by storm, shining a spotlight on the vital, and often "hidden", work of public health in responding to and preventing the spread of infectious disease. Not since the flu

pandemic of 1918 has an infectious disease caused the level of disruption and illness that we witnessed in 2020. Then, as now, public health professionals were called upon to protect the health of our community.

The public health landscape in 1918 differed dramatically from where we are today. Through much of the 20th century, in the absence of vaccines and medications, infectious diseases were the main causes of death in the United States. Contagious illnesses including tuberculosis, whooping cough, measles, pneumonia, and of course influenza, are noted as main contributors to mortality rates in Cambridge in the Board of Health's 1918 Annual Report. Today, these diseases have been largely eliminated or controlled by vaccines and medications.

The health and life expectancy of people in the US improved significantly between 1900 and 2000, with the average lifespan increasing by more than 30 years. Research suggests that 25 years of this gain can be credited to public health efforts (with the remainder related to medical advances). Advancements in the ten top areas of achievement have been extraordinary drivers of health and safety and have changed the focus of public health practitioners over time (see Spotlight on following page).

Public health is now more focused on prevention, public education, and being far more intentional about health equity across different populations, especially communities of color. Improved data collection and analysis enable a more detailed assessment of health inequities that lead to disparities in health status and provide a roadmap for the health department to address and mitigate these health and racial inequities.

CPHD staff were on the front lines and far more visible in 2020 than in previous years.



Spotlight: Ten Great Public Health Achievements of the 20th Century

Vaccination (eradication of smallpox; elimination of polio in children; and control of measles, rubella, tetanus, diphtheria, and other infectious diseases)

Motor vehicle safety (seat belt use, child safety seats, decreased drinking and driving)

Work-related health problems (decrease in workplace injuries and prevention of such illnesses as coal workers' "black lung")

Control of infectious diseases (clean water and improved sanitation reducing typhoid and cholera)

Decline in deaths from coronary heart disease and stroke (attributable to risk factor modification such as tobacco cessation and blood pressure control)

Safer and healthier foods (decreases in microbial contamination and increases in nutritional content, almost eliminating major nutritional deficiencies such as rickets)

Healthier mothers and babies (better hygiene and nutrition, antibiotics, greater access to care)

Access to family planning and contraception (longer interval between birth of children; fewer infant, child, and maternal deaths)

Fluoridation of water (leading to significant decrease in tooth decay)

Recognition of tobacco as a health hazard (education and policies leading to tobacco cessation, reducing exposure to secondhand smoke)

Source: CDC Morbidity and Mortality Report, April 02, 1999/48(12):241-243

Cambridge Pandemic Response 1918: Influenza



**Cambridge, MA,
September 27, 1918**

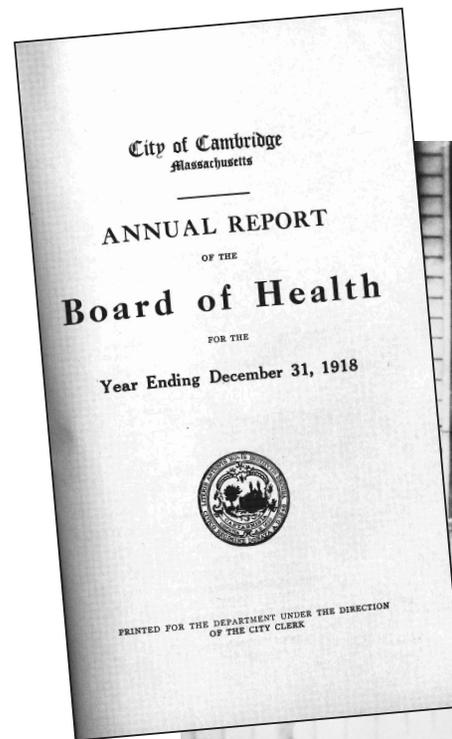
At a special meeting of the Board of Health this day, it was voted that, owing to the very widespread epidemic of Influenza now prevailing, it is declared that a public health emergency exists, and the Medical Inspector is directed to take such measures as may be necessary to combat it.

City of Cambridge
Annual Report of the Board of Health



So began the emergency response of Cambridge's public health staff to the Influenza epidemic of 1918. Having already sent schoolchildren home and redeployed school nurses into the community, the City's Board of Health ordered closed "all places serving soda, tonic, and other kinds of drinks, ice creams, sundaes, etc." Church services

were banned. The Board of Health shuttered pool rooms, bowling alleys, and billiard halls, and requested that attendance at funerals "at homes where death has occurred" be limited to immediate family. The Board also made Influenza a reportable disease, requiring physicians to report all cases by name and address.



Cambridge public health nurses in masks during the 1918 Influenza pandemic.



Cambridge Pandemic Response 1918: Influenza

Although public health officials were accustomed to reporting on the numbers of cases and deaths attributable to the infectious diseases that were prevalent at the time, the magnitude of the flu pandemic was staggering. Under a section of the 1918 Annual Report titled “Diseases Dangerous to the Public,” the Cambridge Board of Health noted:



This year cannot be compared in total to any previous year on account of the pandemic of Influenza, one of the worst scourges the medical world has known. As Influenza became reportable on October 4 of this year, with a total report of 3,014 cases and 471 deaths for the months of October, November and December, it is obvious that a comparison between totals {of other diseases} would be ridiculous.



Over a century later, CPHD readied to respond to COVID-19. This year, as in 1918, the health department acted early to mitigate and monitor the spread of disease, urging residents to wear masks, respect physical distancing, observe proper hygiene, and avoid crowds. We used reportable data to trace contacts. Our public health nurses followed positive COVID-19 cases and provided ongoing clinical advice. Despite the many advances in technology, public health, and medical care since the Influenza pandemic, the fundamental tools for controlling the spread of infection have remained largely unchanged.



Jacobson v Massachusetts: It all started in Cambridge

Massachusetts law has long allowed for the adoption of emergency measures to protect public health and safety.

In fact, a 1904 Supreme Court case that set the precedent for upholding this authority originated here in Cambridge. In 1902, after a smallpox outbreak in Cambridge, the City’s Board of Health issued an order requiring that all adults be vaccinated against the disease. Henning Jacobson, a Cambridgeport resident, refused to comply, alleging that he would suffer harm if vaccinated. He was fined \$5.00. While weighing the threat to the community’s health against Mr. Jacobson’s personal liberties, Massachusetts courts ruled in favor of the Board of Health. Jacobson appealed the decision all the way to the U.S. Supreme Court, which also ruled against him, determining that community members “may at times, under the pressure of great danger, be subjected to such restraint, as the safety of the general public may demand.” Mr. Jacobson ultimately paid the \$5.00 fine.

Cambridge Pandemic Response 2020: COVID-19

Since its inception, the Cambridge Public Health Department has protected and promoted the health of everyone in Cambridge through clinical services, programs, public information, policies, and regulations. We do this year in and year out.

2020, however, was no ordinary year. In addition to our usual activities, the COVID-19 pandemic challenged us to redeploy staff and resources, collaborate with existing and new partners across the City, create new systems and protocols, and respond to rapidly changing information and circumstances. We are grateful to the many partners who worked with

us to combat the pandemic. Below we outline some of the major COVID-19 initiatives of our public health work this year.

Epidemiology: Cambridge COVID-19 Data Center

CPHD’s epidemiology team is dedicated to the collection and analysis of data related to the health of the Cambridge community. In 2020, they focused almost entirely on COVID-19. The City of Cambridge and the “epis” maintained our COVID-19 Data Center, providing a daily update of case data for Cambridge residents, including breakdowns by age, gender, race/

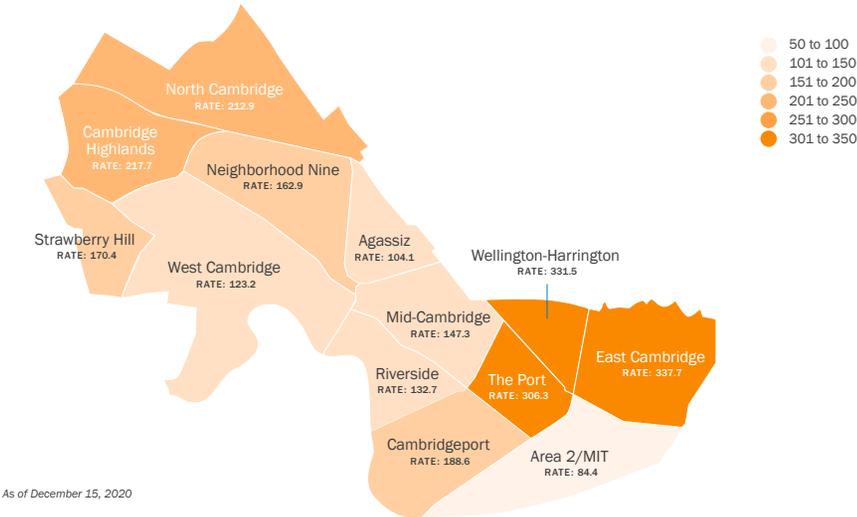
ethnicity, and neighborhood. Epi staff performed detailed analyses of the pandemic’s prevalence and how it was impacting different populations in the community.

The team’s work helped to guide our mitigation strategies by telling the story of COVID in Cambridge. Early on, for example, they identified high numbers of COVID cases in long-term care facilities, prompting an early surveillance testing intervention, the first in the Commonwealth during the pandemic. They also saw disproportionately high rates of the virus among people of color in Cambridge and high rates in particular neighborhoods, allowing CPHD to develop targeted approaches for reaching residents who were more vulnerable to infection and even death.

While we routinely rely on epidemiologic data to help guide our efforts, there was a higher level of urgency this year as the data drove real-time, high stakes decisions: how much testing to offer, and where; whether schools should open or close; where to deploy staff to educate the communities most at risk.

As of December 15, 2020 the Cambridge COVID-19 Data Center had reported 2,759 positive COVID-19 cases, 102 deaths and 1,977 recoveries from the illness among City residents.

COVID-19 Cases per 10,000 Residents in Cambridge, MA



New Confirmed COVID-19 Cases in Cambridge

MARCH 1 - DECEMBER 15, 2020



An epidemic curve (epi curve) shows progression of disease in an outbreak over time. This chart is an epi curve that shows the rate of Cambridge residents with newly confirmed COVID-19 infections. Confirmed cases are people who tested positive with a PCR (molecular) test.

The bars show the number of new confirmed cases each day per 100,000 people (case

rate). The solid line shows the seven-day moving average of confirmed cases per 100,000 people. This is calculated for each day by averaging the case rate of the seven prior days.

This epi curve demonstrates that COVID-19 cases were first detected in Cambridge in March, increased steadily to a peak in April, and subsided to lower levels over the course of

the summer. Newly confirmed COVID-19 cases began to rise again as we headed into the fall and winter months.

[This chart and several others are updated daily on the Cambridge COVID-19 Data Center on the City's website.](#)

Cambridge Pandemic Response 2020: COVID-19



The data on their own are interesting. But when you can attach data to community initiatives, that's where they have power.

Anna Kaplan, Lead Epidemiologist



Mobile Testing

COVID-19 testing was critical to CPHD's efforts to stop the spread of the virus. After the first COVID-19 cases were identified in Cambridge in March, we worked with partners to offer targeted testing to our most vulnerable residents:

- Cambridge was the first municipality in the state to provide onsite testing to residents in all skilled nursing and assisted living facilities.

- In recognition of the difficulty of physical distancing in crowded shelters, the City offered voluntary testing to all residents experiencing homelessness in Cambridge shelters and the Warming Center.

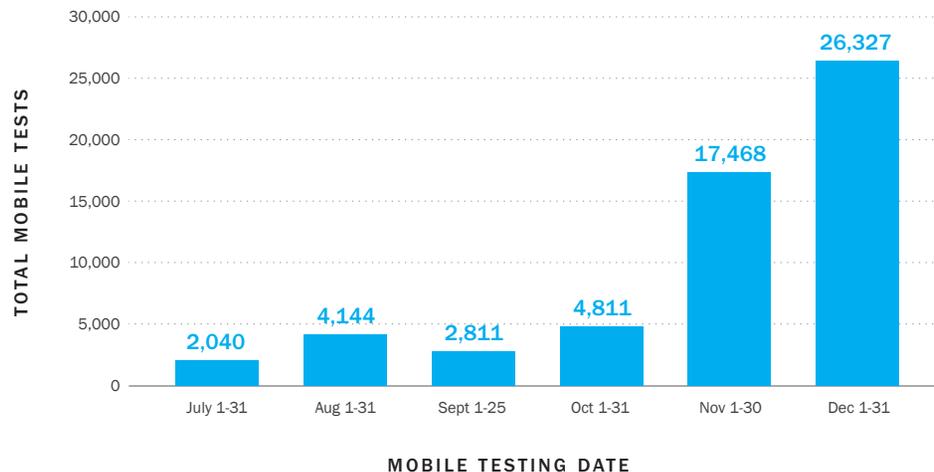
- When data demonstrated disproportionately high rates of COVID-19 infection for people of color and in certain neighborhoods in the City, mobile testing was launched in the Port and in all Cambridge Housing Authority senior buildings.

- Mobile COVID-19 testing was expanded to additional neighborhoods and ultimately offered 7 days a week in 4 locations, including a drive-through site at CambridgeSide. Targeted efforts to educate residents about the importance of testing are ongoing.

- As of December 31, 2020, CPHD had administered 61,955 COVID-19 tests. This includes the mobile tests shown in the chart as well as the tests in long term care facilities, shelters, and senior housing described above.

Community Testing – Total Mobile Tests per Month

JULY 1 - DECEMBER 31, 2020



Cambridge Pandemic Response 2020: COVID-19



Cambridge residents appreciated the free COVID-19 testing offered by the City. About a visit to the CambridgeSide testing site, one reported, “The whole thing was extremely well-organized - down to every last detail...I am very proud of the officials and employees who organized this test site and the professionalism of the people who staff it. It is one of the many reasons I appreciate living in this wonderful city.” Another said, “Thank you... just got the test... and will give back by cooking for the needy.”



Cambridge Mayor Sumbul Siddiqui and Cambridge Chief Public Health Officer Claude Jacob (center left and center right) with CPHD staff before the CambridgeSide drive-thru flu clinic. CambridgeSide is also a COVID-19 testing site.

Cambridge Pandemic Response 2020: COVID-19

Contact Tracing

Laboratories that perform COVID-19 testing report results to the Massachusetts Department of Public Health, which in turn sends the information to local health departments, including CPHD. For positive cases, CPHD public health nurses reach out to residents to assess health, provide guidance about care and safety measures, and collect information about others who may have been exposed to COVID-19 (“contacts” of the person who tested positive). They then reach out to contacts with instructions about COVID-19 quarantine in an effort to stop the spread of disease in the community.

Even before the pandemic became widespread in Massachusetts, staff were monitoring travelers arriving in Cambridge from all over the world. Phone outreach sometimes revealed that an individual did not have a thermometer to check for fever, as required by the protocol, in which case CPHD staff delivered one.

The number of calls to infected residents and their contacts rose exponentially as the virus spread. As of December 15, CPHD staff had made multiple calls to each of the 2,759 positive cases and 1,893 calls to contacts. This activity, in addition to flu clinics, consumed the bulk of public health nursing attention in 2020.

CPHD COVID-19 Call Center

While CPHD nursing staff reached out to residents who tested positive for COVID-19 and their contacts, there were many more individuals whose test results were negative - and who needed to be informed as such. This communication initiative was a massive undertaking. As of December 15, CPHD had delivered over 51,000 negative COVID-19 test results to City residents. Our turn-around time for delivering testing results is one of the fastest in the Commonwealth.

Since the inception of the pandemic, over a dozen CPHD staff from across the department have participated in delivering negative test results. They were joined by a team of volunteers from the Academic Public Health Volunteer Corps, a group of public health students and professionals matched with local public health departments in Massachusetts to address their most pressing needs related to COVID-19. Access to the Cambridge Health Alliance interpreter line enabled the team to communicate results to residents in virtually any language.

While initially all negative results needed to be delivered by phone, a partnership with the Broad Institute of MIT & Harvard has enabled many results to be communicated via email,

with call center staff focused on cases where individuals do not use email or when there are issues that need to be resolved. City library staff have been trained to serve as call center staff to supplement the existing team.

CPHD staff also responded to inquiries from residents seeking test results (over 3,000 calls) and fielded a high volume of additional calls to the department’s centralized COVID-19 hotline, which had taken 1,770 calls and resolved 99% of them as of December 15.

The City of Cambridge built and supported a Call Center for residents to register for test appointments by phone (if they could not do so via online registration) as well as field questions and concerns related to testing.

Information changed rapidly, especially early in the pandemic when little was known about COVID-19 transmission. Staff were continually updated with new guidelines for testing, isolation and quarantine, opening and closure orders, mask wearing, and other pandemic-related concerns to enable them to deliver timely information to the public. Staff from the Cambridge Police Department were trained to schedule appointments for flu shots and COVID-19 testing and have been fielding those calls and related inquiries since late October.

Cambridge Pandemic Response 2020: COVID-19



A CPHD public health nurse administers a flu vaccine at the King Open School clinic.

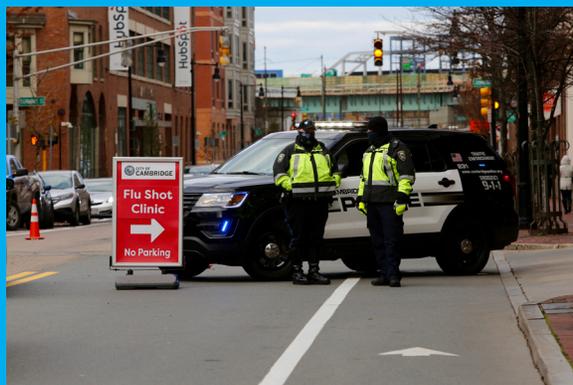
Flu Vaccination

Vaccinating Cambridge residents and workers against the flu was particularly important this year to limit the need for flu-related medical appointments and hospitalizations, freeing up clinical resources to fight the pandemic. CPHD held a total of 20 clinics across the City, vaccinating a total of 2,700 individuals in our community. This was nearly three times as many flu shots than we would administer in a typical flu season. This year we held outdoor clinics at Starlight Square and a drive-through clinic in the parking garage at CambridgeSide. Even in more traditional clinic locations, protocols needed to be modified to mitigate against the spread of COVID-19. Our dedicated public health and school nurse teams staffed these clinics, supported by CPHD volunteers.

Cambridge Pandemic Collaborative

The City's testing capabilities were bolstered by the newly-created Cambridge Pandemic Collaborative (CPC), a public-private partnership designed to provide the structure for sustained activity to protect against COVID-19.

Initially, the CPC supported widely available COVID-19 testing in locations offered by community partners. Flu vaccinations were incorporated into this existing structure, and large-scale COVID-19 vaccination distribution will be added to the project when it becomes available. The Collaborative is working to create a long-term, sustainable, and scalable structure for testing and vaccine distribution that will last through the end of the pandemic.



Cambridge Pandemic Response 2020: COVID-19

Temporary Emergency Shelter

With physical distancing being a key mitigation measure against the spread of COVID-19, Cambridge's homeless shelters were forced to reduce the numbers of guests they could accommodate. City leaders recognized an urgent need to create additional capacity for those experiencing homelessness in our community. Numerous options were evaluated, after which an emergency temporary shelter was constructed at the War Memorial Recreation Center at Cambridge Rindge and Latin School.

The shelter initiative required the collective efforts of several City departments, nonprofit partners, and infectious disease experts.

City Manager Louis DePasquale oversaw the efforts of multiple City departments for the Temporary Emergency Homeless Shelter and several other COVID-19 initiatives.

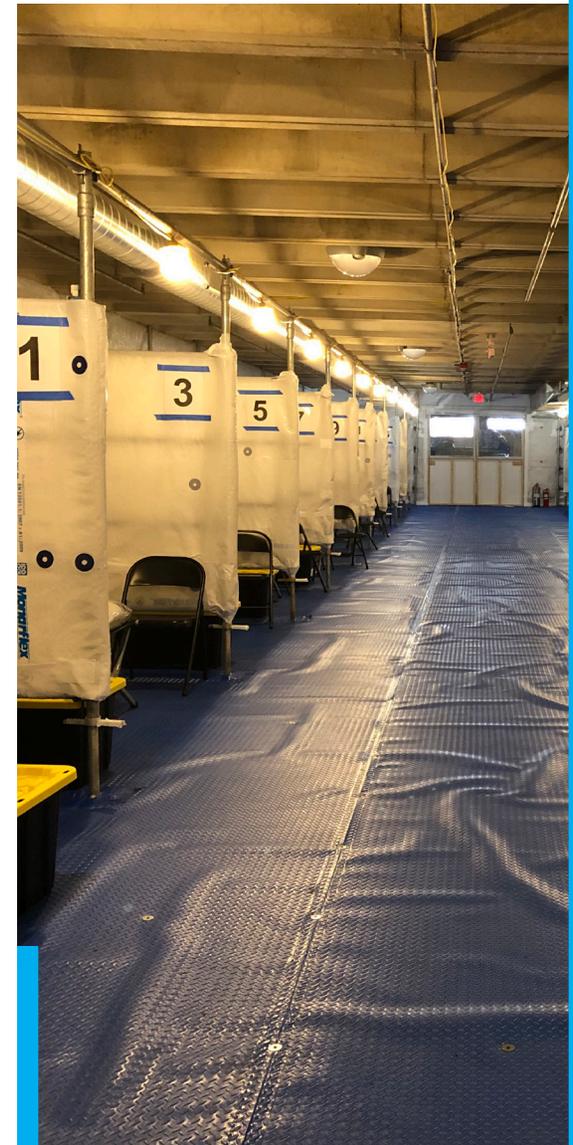


CPHD was tasked with developing the quarantine and isolation protocols for shelter guests. Staff created a triage system that served to protect guests in the shelter, utilize “isolation & recovery hotels” established by the Commonwealth, and treat individuals who were ill in space provided by Tufts University, with the goal of limiting hospitalizations near the spring surge of the pandemic. Only guests not infected with COVID-19 remained in the shelter.

The War Memorial site operated from mid-April through mid-December, serving approximately 100 unique individuals over the eight-month period. Also, the City received a grant from the CDC Foundation that helped offset shelter expenses.

In late December, the temporary emergency shelter was relocated to a decommissioned space at Spaulding Hospital-Cambridge, Inc. Guests have been invited to remain at this newly established Transition Wellness Center shelter for up to a year. Bay Cove/CASPAR—which has been staffing the shelter from its inception, along with the Cambridge Healthcare for the Homeless program—will continue to provide support and clinical services to guests with the goal of preparing them for a transition to permanent housing.

The Temporary Emergency Shelter ready for guests at the War Memorial.



Cambridge Pandemic Response 2020: COVID-19

Cambridge Community Corps

In collaboration with the City Manager’s Office, CPHD launched the Cambridge Community Corps (C3) program to encourage Cambridge residents to adopt and keep practicing safe habits, such as wearing a mask and maintaining good hand hygiene to help slow the spread of COVID-19.

Identified by bright orange shirts, C3 members could be found all summer in City parks, tot lots, basketball courts, and other open spaces having friendly interactions with the public. As community needs changed, so too did the role of the C3. In the fall, C3 members visited the City’s squares to educate restaurant owners about new orders related to alcohol sales and closing times. They also went door-to-door to encourage residents in neighborhoods

especially hard hit by COVID-19 to get tested, and supported CPHD flu clinics.

Building community resiliency is the long-term goal for the program. Just as the C3 has engaged residents to come together and support each other during the pandemic, the Corps could also be deployed in the future to assist with climate change outreach, heat emergencies, and other community challenges.

Community resiliency is critical to our work for the foreseeable future. The impacts of social determinants of health (SDOH)—such as poverty, housing, and employment—and severe racial inequities have been amplified by the pandemic. While SDOH and racial equity have long been drivers of our work, the pandemic has underscored the need to redouble our efforts.



Wastewater Analytics Partnership

CPHD’s environmental health staff, together with Department of Public Works staff, worked with Biobot Analytics, Inc. to take an innovative approach to tracking COVID-19 outbreaks: analyzing wastewater. Biobot offers a new technology that can detect evidence of the novel coronavirus in wastewater, showing the prevalence of the virus in a particular geographic area and serving as an early warning signal of increased COVID-19 infections in the City. Since spikes in viral levels in sewage can help identify increases in infections several days before data from individual testing, the wastewater data can give CPHD officials a head start on a local response.

This new monitoring tool augments our more traditional public health approaches for tracking and responding to disease outbreaks.



Our Work, Reimagined and Redeployed

CPHD began 2020 in typical fashion, focused on community health and wellness, community resiliency, environmental health, school health, and communicable disease prevention. By mid-March, the pandemic demanded that we reimagine our work. City offices were closed to the public. Many CPHD staff worked from home to continue to provide vital public health services, while administrators scrambled to find the personal protective equipment (PPE) and other supplies that our front line workers needed in their roles.

In this section, we provide an overview of the activities we undertook across the department to continue serving the Cambridge community.

Communicable Disease Prevention

CPHD's public health nursing team and epidemiologists are responsible for monitoring communicable diseases (over 90) and foodborne illnesses that are reportable to the MA Department of Public Health. Public health nurses also follow Tuberculosis (TB) cases and staff the TB clinic at the Cambridge Hospital.

At the onset of the pandemic, COVID-19 quickly became the focus of the communicable disease unit. The nursing team was responsible for notifying Cambridge residents of their positive COVID-19 test results and conducting contact

tracing to identify others at possible risk of infection. The team checked in frequently with cases and contacts in isolation or quarantine, making sure they had enough food and other necessities, were monitoring their health, and were taking precautions to protect others in their household and their workplace.

After the in-person TB clinic was closed in mid-March, the public health nursing team revamped protocols to continue service provision to TB patients. With limited hospital appointments available, staff triaged patients based on health status, ensuring that all patients obtained their monthly lab work and had their necessary medications. They also conducted telehealth visits.

The public health nurses saw more TB cases in the community. Not surprisingly, however, given that restaurants were closed for several months to indoor dining, there were fewer reported cases of foodborne illness in 2020 than in previous years.

Population Health Initiatives

The Population Health Initiatives Division offered programming in several focus areas, redesigned due to the pandemic, and took on new roles to support the department's COVID-19 response. In a typical year, much of

the team's activity involves direct community relationships; the pandemic required that we transition much of our in-person work to remote programming.

Early Literacy. When the pandemic put a halt to home visits, staff looked to the outdoors for ways to support literacy for children. The Agenda for Children staff and Literacy Ambassadors held outdoor book distribution events for children living in public housing, providing books and activity kits. They also hosted Book Bike events, virtual Book Bike story times, and placed StoryWalks in City parks.

CPHD Literacy Ambassadors at an outdoor book distribution event.



Our Work, Reimagined and Redeployed

Support for Fathers. Cambridge Dads hosted a Dads and Kids at the Gym event before the pandemic, a success for the fathers and their children. Cambridge Dads also worked with the Men's Health League and Cambridge in Motion to offer a Dads and Kids Bike Ride at Daneyh Park. Cambridge Police officers joined us to help distribute free bike helmets to participants.

Cambridge families enjoying the Dads and Kids Bike Ride.



Healthy Eating and Active Living (HEAL). Our HEAL team altered its work in several ways to address COVID-related challenges. Responding to increased food insecurity, staff frequently updated and shared information about food pantries, free meal programs, school meals, the Supplemental Nutrition Assistance Program (SNAP) and nutrition assistance for families through the Women, Infants and Children (WIC) Program, and disseminated information about farmers markets and the locations of Cambridge stores that accept SNAP. The team contributed to guidelines for safe food shopping, take out, and food pantry operations.

Mindful of the increased time that families were spending at home, we adapted HEAL materials accordingly. This included providing herb seed packets and instructions for spring planting, distributed via the free school meals sites; creating flyers highlighting under-utilized vegetables for use at farmers markets; and sending weekly wellness emails to day care providers, afterschool programs, and CPSD teachers with nutrition, physical activity, and other wellness ideas for families.

The HEAL team also participated in a number of virtual events, including Nutrition and Physical Guidelines for Lesley University students, a virtual parent social held by the Community Art Center, and Let's Cook and Move, a nutrition and exercise event.



CPHD Chief Public Health Officer Claude Jacob (right) at the opening of a Cambridge farmers market.

The Men's Health League (MHL).

MHL adapted its planned in-person work with members of the community to stay connected virtually. MHL launched the Men and Mental Health Conversation Series. Topics included peer support in navigating mental health services; the effect of trauma on mental and physical health; and the importance of physical activity and nutrition.

MHL hosted an online discussion to educate members about telehealth, chronic health issues, options for receiving medical care during the pandemic, and myths and facts about the risks of visiting a healthcare facility. MHL staff also did wellness checks, calling members to stay connected and to respond to needs.

Our Work, Reimagined and Redeployed

In lieu of its popular annual Hoops 'N' Health event, and in collaboration with the Men of Color Task Force, MHL sponsored an online community conversation, The Color of COVID, that explored why and how COVID-19 has exacerbated racial health disparities in communities of color. The session created a space for the community to examine the racially disproportionate impact of the pandemic. MHL staff also moderated Pathways to Justice: The Complexities of Domestic Violence & Black/Brown Women, which explored the paradox of navigating the justice system while fearing unjust harm by police.

In addition to creating programming for members and the broader community, MHL staff also participated in the development and support of the Cambridge Community Corps.

CPHD Chief Public Health Officer Claude Jacob participating in The Color of COVID community conversation.



“

We are addressing root causes {of health inequities}, we are bringing groups together to address these challenges. It was important work for this time.

Albert Pless, Program Manager of the Men's Health League

”

Mental Health and Substance Use Prevention.

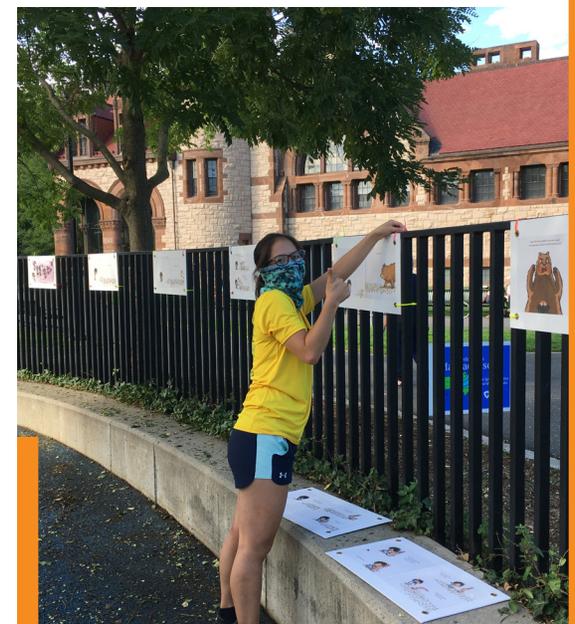
The pandemic created additional stressors for many individuals in the community. Our substance use and mental health team worked to provide guidance and support. Staff teamed with the Mayor's Office to offer a series of four mental health sessions tailored for different audiences and to host a virtual event on suicide prevention and awareness. With Men's Health, they held an event to promote Black, Indigenous, and People of Color (BIPOC) Mental Health Awareness Month.

The team conducted in-person Overdose Prevention and Response trainings pre-pandemic, then continued to offer these

sessions virtually. They also offered 21 Proof, a responsible beverage service training for servers and sellers of alcohol in Cambridge. For Recovery Month, the team created a social media event to highlight the stories of people in recovery.

CPHD staffed the Substance Use Advisory Committee (SUAC), which brings together professionals from across the City to advise on strengthening Cambridge's response to the opioid epidemic and other substance misuse. The committee includes representatives

CPHD's Youth Wellness Coordinator placing the StoryWalk "The Rabbit Listened" for National Recovery Month in September.



Our Work, Reimagined and Redeployed

from public safety (police, fire, and EMS); harm reduction; health care; homeless services; and Cambridge human services. The committee met several times in FY20 before meetings were put on hold due to the COVID-19 pandemic.

As its first initiative, SUAC focused on making naloxone and overdose prevention education widely available. SUAC oversaw the installation of 37 first aid stations in 24 city buildings. Each site includes a NaloxBox kit mounted on the wall with two doses of the opioid overdose reversal medication naloxone (Narcan), rubber gloves, and a rescue breathing device, as well as an automated external defibrillator (AED) cabinet and a Stop the Bleed kit to stop traumatic bleeding. The City also rolled out on-site voluntary first aid training to all interested city employees.

As was the case across all Population Health Initiatives program areas, staff roles changed to support the department with COVID-related activities, helping with the Cambridge Community Corps start-up and management, overseeing the test results inquiry line, and assisting with negative test call backs.

Emergency Preparedness and Community Resilience

CPHD's emergency preparedness staff devoted 2020 almost entirely to helping stop the spread of COVID-19. They were fundamental to our initiatives around mobile testing, flu clinics, the Temporary Emergency Homeless Shelter, Cambridge Pandemic Collaborative, and Cambridge Community Corps that are described in the previous section.

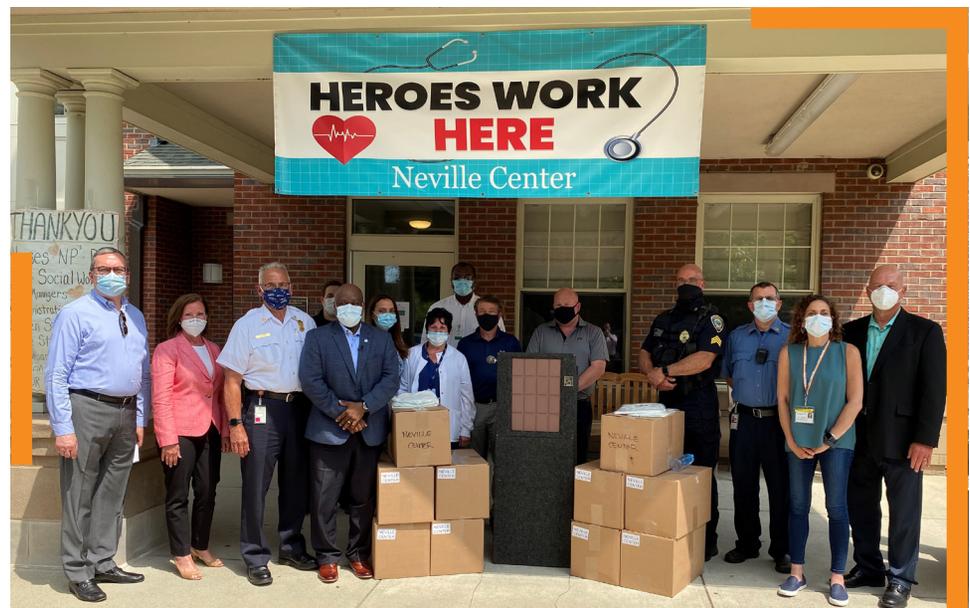
For much of the year, Emergency Preparedness staff worked hand in hand with partners across the City, particularly with the Fire and Police Departments and Pro EMS.

“ One of the silver linings is that we have relationships like we've never had before. We got to work closely with people and build really solid relationships between public health and public safety.

Nancy Rihan-Porter, Manager, Community Resilience and Preparedness

”

City and community partners celebrating the donation of PPE early in the pandemic.



Our Work, Reimagined and Redeployed



The relationships that existed before this crisis were worth their weight in gold.

Sam Lipson,
Director of Environmental Health



Environmental Health

Environmental health staff perform much of the regulatory work of CPHD, providing guidance to many sectors within the community: biotech companies, restaurants, universities, multi-unit housing, custodial staff in various locations, etc. This year, staff were challenged to develop guidance in a climate of rapidly-changing health information and evolving recommendations at the local, state and federal levels.

Early in the pandemic, many businesses that CPHD regulates were shuttered. The take-out and food market sectors, considered essential, remained open and in need of guidance about new safety protocols. CPHD quickly created written guidance on such issues as screening

of employees, sanitizing surfaces, physical distancing, and other mitigation strategies. Staff partnered with the Department of Public Works to deliver masks and plexiglass to front-line workers. Later, as additional sectors were allowed to re-open, CPHD developed and disseminated tailored guidance. Staff worked with Cambridge schools and libraries, the Interfaith Council, and others to review return-to-work plans and also worked with CPHD colleagues and the Community Engagement Team to develop tailored guidance for immigrant and minority communities.

Strong relationships among City departments and with various sectors of the community enabled a high level of trust, bolstering collective problem-solving and compliance despite the changing messages.

The Environmental Health team also served in a liaison capacity to the Cambridge COVID-19 Expert Advisory Panel (EAP). The EAP is composed of local medical and subject matter experts whose academic, clinical, and technological perspectives helped inform and guide Cambridge's COVID-19-related response.

CPHD provided guidance to grocery stores in accordance with state and local orders.



Our Work, Reimagined and Redeployed

School Health

School nurses began 2020 addressing student health issues in their respective schools across the City. When Cambridge Public Schools closed in March due to the pandemic, school nurses were rapidly redeployed throughout the Cambridge Health Alliance system. Their new posts varied: a COVID-19 testing site; call centers; surgical floors and adolescent psychiatry units; a field hospital at Tufts University. Nurses working from home performed COVID contract tracing.

“**Never before have I understood my role as a public health nurse more than I have this year.**

Susan Greenberg, a Cambridge school nurse who was deployed to the CHA COVID-19 testing site

School nurses returned to their full-time roles in the schools in August to prepare for the return of students, teachers, and staff in a COVID-19 environment. In addition to their regular preparation, which includes ensuring that students' vaccinations are up to date, organizing medications, and documenting allergies, they became the COVID-19 subject matter experts in their buildings. New measures included:

- Creating “Get Well Rooms” so that students who become ill during the day can be isolated
- Conducting surveillance testing for teachers and staff
- Teaching faculty and staff about personal protective equipment (PPE)
- Ensuring adequate supplies of PPE, testing equipment, and hand sanitizer
- Educating families and staff about the importance of flu vaccines

School nurses also helped staff the flu clinics offered by CPHD for the public and for first responders.

“

I appreciate the whole department keeping things going despite the challenges. It's an honor to work with all of you.

Alicia Morris,
Healthy Homes Program Coordinator

”

Healthy Homes. Cambridge-Somerville Healthy Homes is a free home visiting program that helps families of young children who have asthma. During home visits, families learn what they can do to reduce asthma triggers and other risks in their home.

After home visits were suspended due to the pandemic, staff provided assistance to families of students with asthma by phone as needed; since many students are not attending school in person, there have been fewer asthma exacerbations. The Healthy Homes coordinator was redeployed to the TB Clinic to assist with telehealth visits for patients who would ordinarily come to the clinic for their preventative treatment. She has also been cross-trained to help with COVID-19 work.

Our Work, Reimagined and Redeployed

Cambridge Healthy Smiles. The Cambridge Healthy Smiles Program focuses on the dental health of Cambridge students, providing classroom education and dental screenings. Nearly 1,500 students were screened this past school year before the pandemic caused school closures.

The First Annual Cambridge Healthy Smiles Water Bottle Initiative provided a bottle to every first and third grader in the CPS. The Sip, Swish, Swallow campaign encouraged water bottles for classroom use, with the

goal of teaching students the importance of drinking water to keep their teeth, mouth, and body healthy. Cambridge Healthy Smiles also reached out to high school students on two important topics: oral health consequences of vaping and the pH of drink choices.

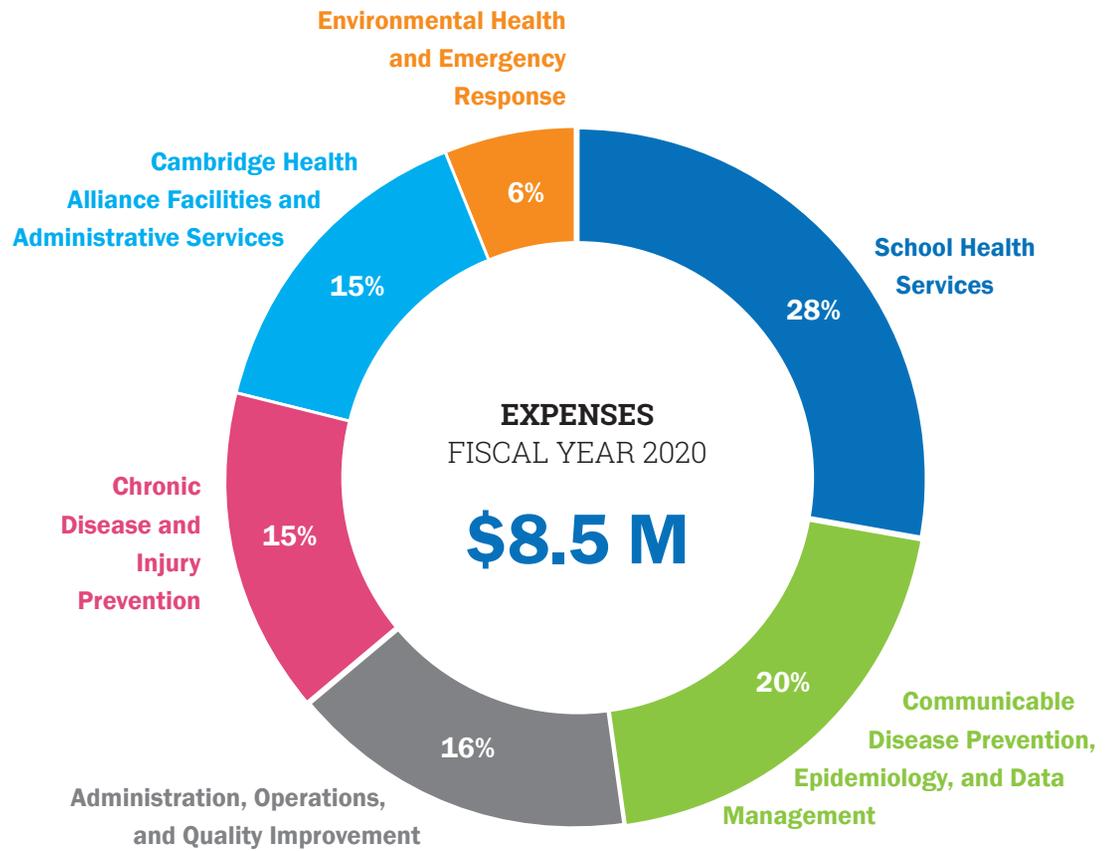
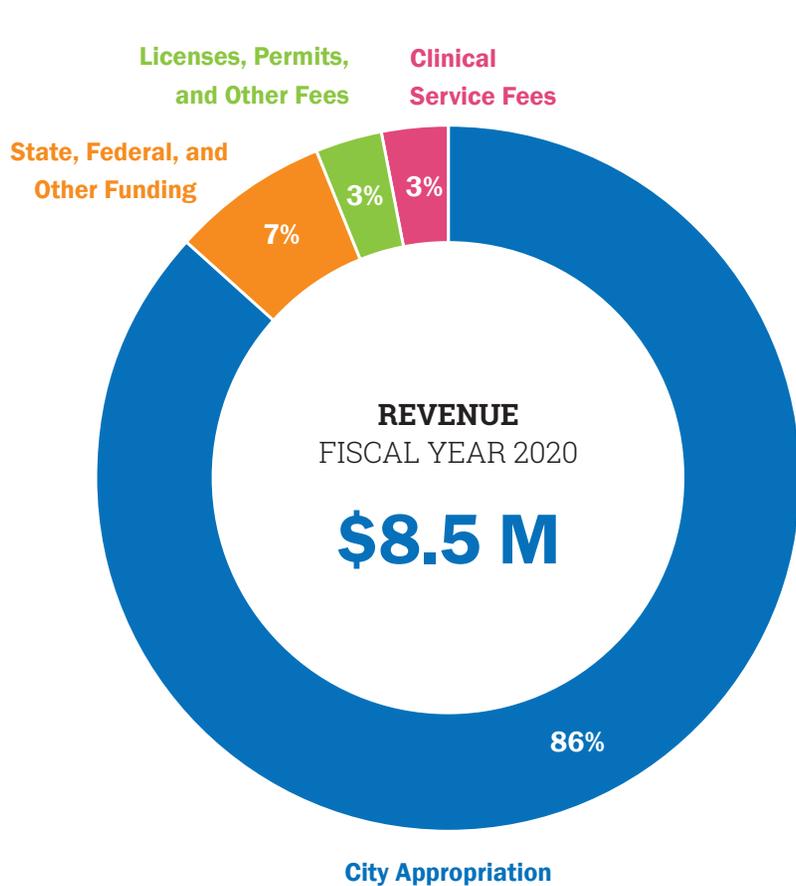
During the pandemic, the Cambridge Healthy Smiles program provided a Dental Emergency Guidance sheet for all Cambridge families to follow. After schools closed, oral health care bags were distributed to students via the free school lunch program.



Pre-pandemic (circa February, 2020), Cambridge students display their new water bottles after a Healthy Smiles educational session.



Financial Overview



Note: Percentages may not add up to 100% due to rounding.

Thank You to Our Partners

In this exceptional year, we are grateful for the many exceptional partners who stood with us in the fight against COVID-19. We appreciate their ongoing commitment to the health of Cambridge residents, their creativity, and their collaborative spirit.

CAMBRIDGE COVID-19 EXPERT ADVISORY PANEL

CITY DEPARTMENTS/INITIATIVES

Cambridge Public Schools
Cambridge Housing Authority
City Manager's Office
Community Development Department
Department of Human Service Programs
Department of Public Works
Fire Department
Gender-based Domestic Violence Initiative
Inspectional Services Department
Law Department
License Commission
Peace Commission

Police Department
Public Library
Traffic, Parking & Transportation Department
Water Department

COMMUNITY PARTNERS

Academic Public Health Volunteer Corps
CASPAR/Bay Cove Human Services
Cambridge Community Center
Cambridge Health Alliance
Cambridge Volunteer Clearinghouse
Cambridge YWCA
Cambridge Economic Opportunity Council
Community Tracing Collaborative
East End House
Fenway Health: AIDS Action
Food For Free
Massachusetts Department of Public Health
Margaret Fuller Neighborhood House
Mount Auburn Hospital

Pro EMS
St. John the Evangelist Church
Spaulding Hospital Cambridge
Y2Y

UNIVERSITIES/AFFILIATES

Broad Institute of MIT and Harvard
Harvard University
Massachusetts Institute of Technology
Lesley University

BUSINESS COMMUNITY

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Cambridge Chamber of Commerce
East Cambridge Business Association
Harvard Square Business Association
Kendall Square Business Association
Trinity Property Management

Acknowledgments

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DESIGN

Fenway Group

CPHD's public health nurses, school nurses, and other department staff at one of the City's many flu clinics.



Cambridge
Public Health
Department

 **CHA**
Cambridge
Health Alliance



Cambridge Public Health Department is a city department administered by Cambridge Health Alliance, a regional health care delivery system.

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