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MESSAGE

Chief Public Health Officer



TO THE CAMBRIDGE COMMUNITY,

It was an honor to be called out of retirement to serve as the City's Interim Chief Public Health Officer during the national search for a new leader of the Cambridge Public Health Department (CPHD). In my 27 years as a clinician and administrator at CPHD, I loved my work caring for the Cambridge community. I welcomed the opportunity to provide leadership as we address the ongoing challenges of the COVID-19 pandemic.

I am very proud of the work that CPHD staff performed over the past year. The level of professionalism, creativity, and commitment doesn't surprise me given my knowledge of the department, but it does give me a renewed faith in the power of public health. Triedand-true public health tactics including testing, data collection, and disease tracking helped to slow the spread of COVID-19 while we awaited the vaccines.

We celebrated with excitement and relief the arrival of life-saving COVID-19 vaccines early in the year. Although the pandemic is not behind us, the efforts of CPHD and our partners at Fire, Police, Pro EMS, Cambridge Health Alliance, Inspectional Services, the Cambridge Public Schools, and others at the City, state and community levels have positioned us well to minimize disruption and illness.

I am grateful to the City Manager and City Council for allocating the financial resources that we needed to fight the pandemic. In 2021, Cambridge offered free COVID-19 testing for residents, administering over 183,000 tests. We administered 9,384 COVID-19 vaccines and 2,219 flu vaccines. Staff reached out to thousands of individuals to counsel them about possible COVID-19 exposure. The work was demanding, but staff were resolute that no one be left behind. Beyond the COVID-19 initiatives, CPHD continued its programmatic work in healthy eating, substance use prevention and mental health, environmental health, school health, and many other areas.

Ensuring equitable access to information and services is a CPHD priority made all the more important by

the pandemic. We strove to educate and protect all residents via direct neighborhood outreach, multilingual forums and materials, extensive work with the schools, and partnerships with nonprofits and the business community. We will continue to engage with residents at every opportunity.

Importantly, in a national environment rife with divisiveness and misinformation, I extend my thanks to the residents of Cambridge for embracing public health recommendations. The public's adherence to mask guidance and willingness to seek testing and vaccination have been major contributors to our success in keeping COVID-19 numbers in check.

I am optimistic. Booster shots, vaccines for children, and better treatment for COVID-19 illness offer promising protection against the virus that has caused so much trauma in our community. As we move forward, CPHD will stay focused on health and healing, ever mindful of the inequities that have been laid bare by the pandemic.

Sincerely,

Susan Breen

Interim Chief Public Health Officer

MESSAGE

Public Health Commissioner



DEAR CAMBRIDGE COMMUNITY,

We've come a long way in 2021 in our efforts to address the COVID-19 pandemic. While it may feel like new challenges arise on a daily basis, I am thankful that everyone across Cambridge Health Alliance (CHA) continues to come together to overcome obstacles and support one another, our patients, and the broader community.

Our staff worked tirelessly this year to address the disease burden of COVID-19 and to educate patients and the public about the importance of COVID-19 testing and life-saving COVID-19 vaccines. We brought messages out into the community in many languages and with a range of partners

who could help reach diverse audiences, and we offered testing and vaccines in locations that were welcoming and accessible.

The pandemic transformed how we deliver care and revealed tremendous strength and resiliency as we navigated an unprecedented public health emergency. We created new models of care to meet our patients' needs and did our very best to support employees. I applaud the ingenuity and determination that I witnessed on both the clinical care and public health fronts.

CHA saw many accomplishments in 2021. We completed a successful Joint Commission survey; we earned "A" grades at both CHA Cambridge and Everett Hospitals from Leapfrog, and; we were named one of the top maternity hospitals in the nation by Newsweek. We also completed a robust strategic planning process that resulted in an exciting patient-centered approach that is anchored by a new vision: Equity and Excellence for Everyone, Every Time.

CHA is proud to serve all of those in need, and our commitment to vulnerable and diverse patients is core to our mission. We created a new role and hired our first Chief Diversity, Equity and Inclusion Officer who will support our aim to be an antiracist, diverse and equitable organization.

I extend my most sincere appreciation to the staff at CHA and the Cambridge Public Health Department for their efforts this year. Their work in clinical settings and in the community truly helped to mitigate the burdens of COVID-19.

As the year draws to a close, we welcome new leadership at the health department. Derrick Neal, a seasoned administrator with extensive public health experience, joins us as Cambridge's chief public health officer. I look forward to working with him to improve public health in Cambridge. I also acknowledge with thanks the tremendous work of Susan Breen, who stepped in to serve as the interim chief while we conducted our national search. The seamlessness of ongoing public health efforts over the course of transition speaks to the professionalism of CPHD staff; I applaud their dedication.

Sincerely,

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. Health equity is a guiding principle, and addressing the social determinants of health is fundamental to our approach. We know that better health for everyone begins with challenging beliefs and structures that perpetuate inequality, discrimination, and racism. We continue our efforts as we protect the Cambridge community against COVID-19 in addition to our other important public health work. After all, improving quality of life is what we do!



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

One of the few constants in 2021 was change. CPHD, along with our partners, responded to ever-changing protocols and policies; new vaccines released; new research findings; and changes to the virus itself.

January of 2021 represented month 11 of the COVID-19 pandemic in Cambridge. COVID-19 cases were surging, hospitals becoming overwhelmed, schools and businesses shuttered. Indoor and outdoor mask mandates were in place. But despite the bleak start to the year, there was hope on the horizon. In December, 2020, two messenger-RNA (mRNA) COVID-19 vaccines had been approved for emergency use in the United States for adults. Access to vaccinations was limited initially, even after a viral vector COVID-19 vaccine was approved

City Manager Louis DePasquale and Interim Chief Public Health
Officer Susan Breen (center left and center right) with CPHD staff
at a vaccine clinic held at King Open School in the fall.



in February, due to manufacturing and supply chain challenges. Despite all these challenges, CPHD was committed to vaccine equity for all residents, which is further explained in our COVID-19 Vaccine section.

Over the course of several months, vaccines were made available to seniors, essential workers, and people with underlying medical conditions that made them more susceptible to severe illness due to COVID-19. As vaccine supply grew, additional age groups were deemed eligible, and by April all individuals 16 and older were eligible to receive a COVID-19 vaccine. Eligibility did not translate directly into vaccine uptake. There was some vaccine hesitancy in the community and the need for education. CPHD conducted outreach in multiple languages and worked with partners to encourage residents to get vaccinated.

By late spring of 2021, COVID-19 cases were dropping. The outdoor mask requirement was lifted, and restrictions on businesses began to relax. Vaccines were approved for children aged 12 - 15. Public health officials were cautiously optimistic. However, data from a July COVID-19 cluster in Provincetown indicated that Delta, a more transmissible variant of the original COVID-19 virus, was present in Massachusetts. Moreover, this cluster included several individuals who had



CPHD clinical staff prepare vaccines at a clinic at Cambridge Rindge and Latin School.

been vaccinated, demonstrating that so-called "breakthrough cases" were possible. COVID-19 cases began to rise again and Delta quickly became the dominant strain in the United States.

CPHD and the City responded by reinstating the city's indoor mask mandate, expanding both mobile city testing and on-site testing for areas in need, providing education and community outreach, working with Cambridge Public Schools (CPS) to develop a more robust testing program, and advising and supporting the CPS Superintendent with establishing a COVID-19 vaccine mandate for eligible CPS students.

Research into vaccine efficacy indicated that immunity to COVID-19 waned over time, and booster shots were recommended. CPHD began providing booster vaccines at their annual flu vaccine clinics. In October, vaccines were approved for children ages 5 - 11, and CPHD hosted pediatric vaccine clinics to serve this population. In addition, CPHD, the City, and CHA promoted local vaccination sites.

In early December, the Omicron variant was first reported in Massachusetts. Researchers are studying its properties to assess its transmissibility, the severity of disease it causes, and the effectiveness of vaccines in protecting against it.

Throughout 2021, CPHD staff faced many challenges including the ever-changing environment, staffing challenges, misinformation about COVID-19 and the vaccines, and COVID-19 fatigue. Many felt that the light at the end of the tunnel with the new vaccines was dimmed with the advent of the Delta variant and other variants such as Omicron. Despite the challenges, many staff felt proud of the hard work they and their CPHD colleagues accomplished. Partnerships that were developed last year grew stronger. The department's commitment to vaccine equity was demonstrated in the high numbers of vaccination across all races/ethnicities and genders in Cambridge. The large number of tests conducted in CPS allowed many students to stay in school and remain safe. Below, we outline some CPHS's major COVID-19 initiatives.

Epidemiology

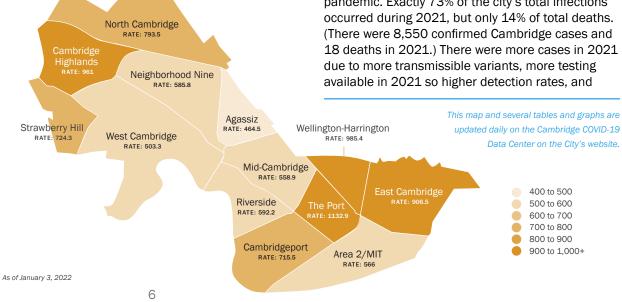
As was true in 2020, epidemiology staff (Epi) dedicated most of their time to COVID-19 efforts this year. Data needs and COVID-19 cluster

investigations continued to be priorities; the availability of vaccines created additional reporting and clinic responsibilities. Staff monitored COVID-19 cases, testing activity and vaccination numbers to help inform public health priorities. The data allowed for targeted outreach, siting of testing locations, and vaccine planning and communications.

Cambridge, MA

Epi staff updated data sets daily, enabling updates to the Cambridge COVID-19 Data Center. Municipal decision-makers were able to consult the data when considering policy decisions related to COVID mitigation strategies. The Data Center continues to display a range of data elements by age, gender, and race/ethnicity and also presents neighborhood-level information about COVID-19 cases and case rates. COVID-19 Cases per 10,000 Residents in

As of December 31, CPHD reported 11,652 cumulative COVID-19 cases and 128 deaths. among Cambridge residents since the start of the pandemic. Exactly 73% of the city's total infections occurred during 2021, but only 14% of total deaths. (There were 8,550 confirmed Cambridge cases and due to more transmissible variants, more testing available in 2021 so higher detection rates, and

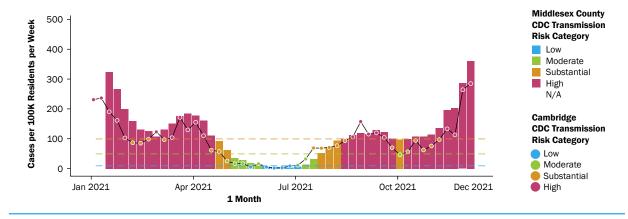


2021 being a full year of the pandemic compared to 2020 when Cambridge's first case occurred in March 2020. The low number of deaths is an indicator of the effectiveness of COVID-19 vaccines and better treatment options. As of December 28, 88% of Cambridge residents had received at least one dose of a COVID-19 vaccine and 74% of residents were fully vaccinated.

A person's risk for COVID-19 infection is directly related to the risk of exposure to people who are infected, which is in part determined by the extent to which the virus is circulating in the surrounding community. In 2021, the US Centers for Disease Control and Prevention (CDC) established COVID-19 transmission risk categories to help guide decision-making on COVID-19 mitigation measures.

CDC looks at two numbers — total new cases and percent positivity — to determine the level of community transmission at the county level. Risk categories are defined as low, moderate, substantial, or high; the higher the number of new cases and percent positivity, the higher the transmission risk category. In areas of substantial or high transmission, CDC recommends universal masking in indoor public spaces in addition to other prevention strategies to prevent further spread.

Middlesex County and Cambridge Cases by Risk Category (January through December 15, 2021)



The above chart shows transmission risk categories for Middlesex County and Cambridge from early January through December 15, 2021. The colored bars indicate the transmission risk categories for Middlesex County. The black line represents Cambridge's transmission risk categories over the period. The chart demonstrates that COVID-19 transmission risk was high or substantial through April, then decreased until it reached the low risk category in July. Transmission risk began to rise, moving from moderate to substantial to high. After a dip back to substantial in October, transmission risk began to climb again. As of December 15,

transmission risk was high for both Middlesex County and Cambridge.

COVID-19 Vaccines

As COVID-19 vaccines were rolled out by the state, the health department hit the ground running. Throughout the process, CPHD made efforts to prioritize vaccine equity, especially for racial and minority groups who shouldered a disproportionate burden from COVID-19. CPHD staff were able to identify areas where COVID-19 was more prevalent, using this information to direct their efforts in

vaccine distribution as well as vaccine education and promotion.

In early 2021, CPHD received limited doses of vaccine and focused on the most vulnerable residents in the city. Many of these individuals lived in public and elderly housing; vaccine clinics were set up nearby or vaccine was administered at residents' homes for homebound populations. It was vital to reach these populations as the mass vaccination sites that the state had set up for initial vaccine distribution were not readily accessible to many of these residents. Targeted outreach included the Cambridge Community Corps going door-to-door to let residents know about upcoming clinics and answering their questions and concerns. CPHD partnered with building management organizations to do robocalls and post materials about upcoming clinics.

Meanwhile, the CPHD communications and marketing team worked on providing vaccine education as well as resources on how and where eligible residents could get vaccinated. In partnership with Cambridge Health Alliance staff and city departments, including the Community Engagement Team and the Public Library, CPHD staff held educational forums targeting Black residents as well as Spanish- and Haitian Creole-

speaking residents. The communications team helped match CHA providers with various local organizations who were offering virtual vaccine question and answer sessions. Communications staff also worked with the City to draft vaccine information that was translated into multiple languages and sent to all households in Cambridge. A total of 9,384 COVID-19 vaccines were administered as of December 31.

As a result of these efforts, the City of Cambridge consistently outpaced the state (and country) in vaccination rates among Black and Hispanic residents. As of December 21, 86% of Black residents and 81% of Hispanic residents in Cambridge had received at least one dose of vaccine compared to 68% of Black and Hispanic residents statewide. (See table below.)

City Vaccine Update (as of Dec. 21) Vaccination by Race/Ethnicity

The proportion of residents by race and ethnicity who have received **at least one dose of vaccine** in Cambridge and the state:

Race/Ethnicity	Cambridge ¹	MA ²
Asian	81%	83%
Black	86%	68%
Hispanic/Latinx	81%	68%
Multiracial	>95%	>95%
White	78%	79%
Other/Unknown	+6% of population	+6% of population
Total % of all residents who have received at least one dose	87%	84%

¹ MA Department of Public Health Weekly COVID-19 Municipality Vaccination Report, December 23, 2021.

² MA Department of Public Health Weekly Vaccine Report, December 23, 2021. Data for Cambridge and Massachusetts are current as of December 21, 2021.

Flu Vaccination

Flu vaccinations remained very important this year to help reduce the need for flu-related medical appointments and hospitalizations and free up clinical resources still needed to fight the pandemic. Flu vaccine clinics were combined with the provision of COVID-19 vaccines for individuals who still needed their first, second, or booster dose. As of December 31, CPHD had administered 2,219 flu vaccines. At each site, strict safety protocols and procedures were implemented to reduce the spread of COVID-19. The vaccine clinics were staffed by

Administrative staff at a flu vaccine clinic at King Open School.

Throughout the year, CPHD staff across all divisions and departments worked at vaccine clinics.



CPHD's dedicated public health and school nurse and epidemiology teams and Cambridge Fire Department staff and supported by fellow CPHD staff and the Cambridge Community Corps.

Community COVID-19 Testing

The City, along with CPHD and our many partners including the Fire Department and Pro EMS, continued to provide free COVID-19 testing to anyone who lived or worked in Cambridge. Testing was still crucial in CPHD's efforts to stop COVID-19. Throughout the year, the need for testing fluctuated, and testing was expanded to meet these needs. From January 2 to December 27, 2021, 183,187 tests were administered. Of these, 4581 positive cases were detected.

School Testing

CPHD and the Cambridge Public Schools (CPS) provided a comprehensive COVID-19 testing program for students and staff. Since fall 2021, school health staff have been performing three different categories of COVID-19 testing:

 Symptomatic: If a student presents potential symptoms while at school, the student will be assessed by a school nurse. A nurse or health



Cambridge Mayor Sumbul Siddiqui (center left) with CPHD and Cambridge Fire Department staff at a vaccine clinic at the Citywide Senior Center.

aide then administers a rapid antigen test. If a student tests negative, the nurse evaluates whether symptoms are mild enough for the student to stay at school.

 Routine COVID Safety Checks (formerly referred to as pool testing): This surveillance testing is done once weekly to detect asymptomatic cases and is for students, staff, and any program staff operating in CPS buildings. Individual samples are collected and then grouped together before

being sent to a lab for PCR testing. If a pool tests positive, follow-up rapid antigen testing of each individual is performed to identify the specific individual(s) infected with the coronavirus.

Test and Stay: Rapid antigen testing is performed by school health staff for any unvaccinated student who is considered to be a close contact of a positive case. The testing is done for at least five days in lieu of a quarantine period at home, allowing a student to stay in school if each test is negative. Fully vaccinated students who are deemed a close contact may continue attending school and are recommended to obtain a PCR test five to seven days after exposure.

Case Investigation and Contact Tracing

For people who tested positive for COVID-19, public health staff reached out to 1) ensure that residents had what they needed to quarantine and 2) identify "close contacts," those who had been in close proximity to the infected person. Close contacts were subsequently notified of possible exposure and encouraged to get tested. CPHD staff were aided by the Community Tracing Collaborative, a state-funded initiative. Beginning late fall, this work transitioned to a regional public health collaborative, with case

investigator and contact tracing staff jointly covering Cambridge, Chelsea, Revere and Winthrop. From January 1 to December 29, over 8,200 individuals with COVID-19 in Cambridge - and their close contacts - were contacted.

Cambridge Community Corps (C3)

July marked the one-year anniversary of the launch of the C3. The C3 was developed by the health department in collaboration with the City Manager's Office. Initially, the C3 served as a friendly COVID-19 information resource for residents in parks, on playgrounds, and other outdoor spaces.

As community needs changed, so too did the role of the C3. The C3 promoted COVID-19 testing in neighborhoods with high rates of COVID-19. Members went door-to-door to residents to promote the department's many COVID-19 and flu vaccine clinics, and worked at clinics in logistical roles. When the indoor mask mandate was implemented in September, members helped the Inspectional Services Department distribute mask signage to establishments in Central Square. During heat waves, C3 members distributed water bottles, popsicles, and other heat safety materials to residents in Cambridge parks. Members also helped



promote the City's Participatory Budgeting and The Port Infrastructure Project with the Department of Public Works as well as supporting the Dads & Kids Bike Ride and Cambridge's Safer Homes, Safety Community Gun Buyback. The C3 continues to be an agile resource for the Cambridge community during the pandemic, working to make Cambridge more resilient and prepared for potential emergencies.

A C3 member with a member of the Cambridge Fire Department at a vaccine clinic at King Open School.



Responding to the Public

CPHD responded to many questions from the general public. This included COVID-19 inquiries made directly to CPHD and/or the City of Cambridge. Staff answered calls, emails, and social media posts ranging from concerns about variants, questions about vaccine clinics, and obtaining a new vaccine card. As of December 30, over 800 inquiries were answered by CPHD staff.

Wastewater Analytics Partnership

CPHD and the Department of Public Works continued their wastewater surveillance initiative using technology developed by the Somerville-based company Biobot Analytics, Inc. Since November 2020, CPHD has been monitoring wastewater for early signs of increased COVID-19 transmission. Short-term spikes in infections can be found in wastewater about four to seven days before they would be picked up through PCR or antigen testing. A spike in wastewater viral levels could reflect a localized outbreak or a citywide pattern. To identify more actionable signals, the City in September 2021 began sampling four smaller area wastewater collection sites at locations that had been historically high risk areas for COVID-19 infections. CPHD was able to use this information on several.

occasions to take immediate local action, such as door-to-door outreach to encourage vaccination and testing, masking up, and other preventive measures for residents to follow.

Staff Reactions to their COVID-19 Vaccines

I remember the excitement. I remember being afraid and being nervous. Just to be able to hug my 89-year-old mother again. That moment was just a flood of emotions.

-Tracy Rose-Tynes

I felt an overwhelming sense of relief.

-Kristin Ward

I just felt really good. I felt proud of the long history Cambridge has working with the biotech sector to meet high standards of safety. I remember when Moderna was just three to four people. Working with the clinics was so much fun, you saw the emotional response from people."

-Sam Lipson

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Throughout 2021, the health department balanced its response to the pandemic with its other public health work. 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 epidemiologist continued their COVID-19 work in addition to monitoring other communicable diseases and foodborne illnesses, organizing vaccine clinics, and running Cambridge Hospital's Tuberculosis (TB) clinic.

A public health nurse with Cambridge Fire Department staff at a vaccine clinic at Citywide Senior Center.



With the advent of the COVID-19 vaccine, the public health nursing team and epidemiologist organized and ran nearly 100 COVID-19 and flu vaccine clinics; staff from across the health department helped to operationalize these clinics. The public health nurses partnered with the state's Community Tracing Collaborative throughout most of the year, and as of December 1, transitioned to a state-funded regional public health collaborative to notify Cambridge residents of their positive COVID-19 test results and conduct contact tracing to identify others at possible risk of infection. The nursing team checked in frequently with cases and contacts in isolation or quarantine, monitoring their health, addressing concerns, and making sure they were taking precautions to protect others in their household and their workplace. The public health nurses continued to answer questions and provide updated information and education about COVID-19 to the general public, businesses, and other local organizations.

Public health nurses also monitored cases of foodborne illnesses, such as Salmonella and Campylobacter, and tick-borne disease cases. Both rates increased during the summer and may be linked to residents starting to dine at restaurants again and venturing outdoors more. After



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

Cambridge Health Alliance had recent admissions of Legionnaires' disease, the nurses were asked to present their case investigation findings to physicians and other medical staff who were interested in knowing what occurs after diagnosis and treatment. The TB clinic operated this year with a hybrid model of telehealth and in-person visits. Public health nurses performed a case management role, managing all aspects of TB care for Cambridge residents who have active TB, including home visits for directly observed therapy.

Population Health Initiatives (PHI)

In 2021, the PHI Division was able to start refocusing on their programming while still undertaking COVID-19 duties. Teams experimented with how to best connect (with in-person and online events) and deliver materials and messaging to the Cambridge community. Below are highlights from each PHI unit.

Early Literacy. The Early Literacy team's 2021 work included both outdoor and virtual activities promoting literacy, family activities, and parent and caregiver support.

 Let's Talk!, a literacy program of the Agenda for Children Literacy Initiative, held outdoor book

CPHD Literacy Ambassadors distribute books at a vaccine clinic at Cambridge Rindge and Latin School.



distribution events for children living in public housing, providing books and activity kits. They, along with their partners, also hosted Book Bike events, virtual and in-person parent-child playgroups, Book Bike story times, and placed 10 StoryWalks throughout City parks. They held many workshops for parents, including a discussion about race that was designed for white families. Let's Talk! also created monthly activity calendars for families to stay connected. For Family Literacy Month, Let's Talk! held an outdoor Bilingual Book Event and created fun activities such as Family Literacy Bingo where children could win a book.

Cambridge Dads, a program to support fathers, held many in-person and virtual events. Events included Dad & Kids at the Park, Dad & Kids at Home, and a new online dads discussion group. For Father's Day, Cambridge Dads did a series of events as well as a social media campaign that featured fathers explaining what fatherhood meant to them. Cambridge Dads, along with the Men's Health League and Cambridge in Motion, held its second annual Dads & Kids Bike Ride at Danehy Park. Cambridge Police officers distributed free bike helmets and participated in the bike ride. Several Cambridge



A Cambridge family at the Dads & Kids Bike Ride.

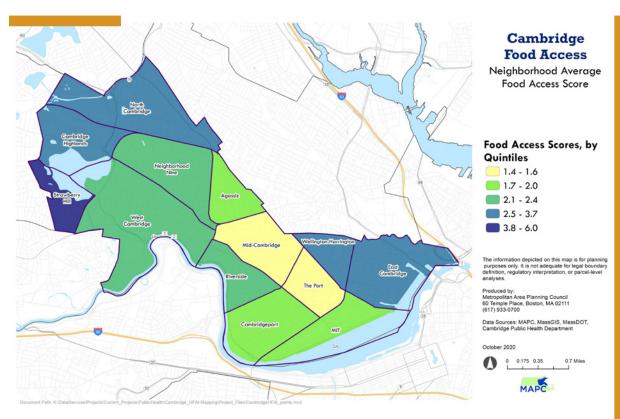
Community Corps members were also present to provide support for the event. The Cambridge Community Development Department, through a partnership with Bluebikes, provided free day bike passes to any dad in need of a bike.

The Pathways to Family Success program developed programming goals based on direct feedback from parents. Early in 2021, Pathways to Family Success began offering monthly book and activity materials pick-up events for parents and families. Later in the year, Pathways completed a round of minigrants through the Curiosity Fund: eligible parents had the opportunity to request funding for something that would help their family learn and grow. Pathways allocated \$8,600 on behalf of 15 families and a total of 35 children. Families used funds for museum memberships, taekwondo lessons, activity supplies, and more.

Healthy Eating and Active Living (HEAL). The HEAL team continued its work to coordinate and share information about food security resources available in Cambridge. This included information about food pantries, free meal programs, school meals, the Supplemental Nutrition Assistance Program (SNAP) and farmers markets that accepted SNAP, and nutrition assistance for families through the Women, Infants, and Children (WIC) Program. The HEAL team coordinated with emergency food agencies, public health nurses, and state contact tracers to develop a coordinated system to provide food for residents in need while in quarantine or isolation due to COVID-19.

The Cambridge SNAP Match Coalition, led by the HEAL team, gave out \$34,049 in matching funds in 2021. This was a 43.7% increase from last year. This program increases access to fresh, local food for SNAP shoppers by increasing their purchasing power through a match of up to \$15 per visit at participating Cambridge farmers markets.

The HEAL team promoted Bluebikes reduced-price memberships available to residents that have a qualifying income or are eligible to participate in SNAP, WIC, MassHealth, or other assistance programs. The team was also able to directly sign-up qualifying individuals.



A map of Food Access Scores from the "An Analysis of the Cambridge Food Environment: Food Retail Survey & Food Shopping Survey," which shows the availability of healthy food at affordable prices from the lowest score (1.4-1.6) to the highest (3.8-6.0) in each neighborhood.

HEAL awarded \$10,000 in Cambridge in Motion Mini-Grants to ten local organizations to develop activities that promote healthy eating and active living in Cambridge. The program is a partnership of the health department, the Cambridge Food and Fitness Policy Council, and the City of Cambridge.

During the summer, HEAL, in partnership with the Cambridge Food and Fitness Policy Council and the Metropolitan Area Planning Council, completed its report "An Analysis of the Cambridge Food Environment: Food Retail Survey & Food Shopping Survey." The report focused on the local food retail environment as well as the food shopping experience at the neighborhood level. The report will serve as a blueprint for creating a more equitable food environment in Cambridge.

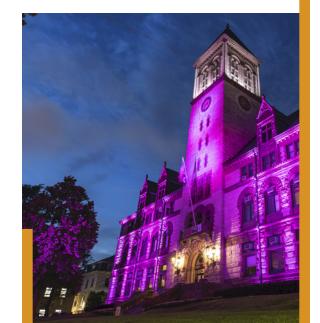
HEAL staff continued to create virtual content for Cambridge Public Schools (CPS) such as the monthly "Harvest of the Month" videos, which CPS Elementary Wellness Teachers included in their virtual lesson plans. HEAL also participated in many virtual and in-person outside events that promoted childhood physical activity, bike riding and safety, and families cooking healthy recipes together.

The Men's Health League (MHL). MHL continued its work through both virtual and small in-person events. In collaboration with the Men of Color Task Force and Cambridge Public Health Department, MHL sponsored an online community conversation, The Color of COVID-19: The Vaccine. The event featured a panel of community leaders as well as public health experts on the COVID-19 vaccine. MHL also moderated Pathways to Justice Part II: The Complexities of Domestic Violence & Black/Brown Women, which explored the paradox of navigating the justice system while fearing unjust harm by police.

MHL organized three in-person Snack and Learn sessions with the City's Department of Human Services Youth Basketball League, providing health education and resources to primarily groups of young boys of color. MHL was also a sponsor of the Father and Father Figures of Color kick-off cookout. MHL hopes to continue this partnership and participate in discussions throughout the year.

MHL worked on the development of the Mending Cambridge Fellowship Program, which they hope to launch in the coming months. MHL staff also continued to support the operation and management of the Cambridge Community Corps. Mental Health and Substance Use Prevention. The Substance Use Prevention (SUP) team continued its work to provide mental health and substance use prevention support to the Cambridge community. They awarded their first-ever Youth Mental Health and Wellness mini-grants and gave a total of \$6,000 to six local organizations.

City Hall lit up in purple for National Recovery Month in September.



Since early 2021, there has been an increased number of opioid overdoses at shelter sites in Cambridge. To help address this, the SUP team partnered with outreach staff at the Access: Drug User Health Program to offer overdose prevention training and naloxone to people at CPHD vaccine clinics at shelter sites. In May, SUP, along with Pro EMS, the Cambridge Police Department (CPD), the Central Square Business Improvement District, and Harvard University, conducted store-to-store outreach in Harvard and Central Squares to educate small businesses about overdose prevention and response. The Substance Use Advisory Committee, co-chaired by CPD Acting Commissioner Christine Elow and Cambridge Commissioner of Public Health Assaad Sayah, created three subcommittees to focus on

CPHD's Substance Use Prevention Coordinator with partners in Central Square for overdose prevention and response outreach.



high-priority community issues: public safety, recovery support, and coordinated treatment and care.

The SUP team promoted mental health and recovery throughout the year, including a social media campaign on coping skills for Mental Health Awareness Month; an in-service training for CPHD staff with the Men's Health League for Black, Indigenous, and People of Color Mental Health Awareness Month; a recovery-themed booklist with the Cambridge Public Library; a StoryWalk; and City Hall lit up in purple for National Recovery Month.

SUP staff recently completed a qualitative needs assessment in partnership with the Cities of Somerville and Medford that examined current stimulant misuse and how it should be addressed. In the last five years, stimulant use has been increasing significantly locally, especially among populations that had previously not used stimulants.

Communications

The communications and marketing team kept the Cambridge community updated about COVID-19 and other health concerns and topics. This year's COVID-19 related focus was on promoting vaccination. The team created targeted materials and organized educational forums for populations



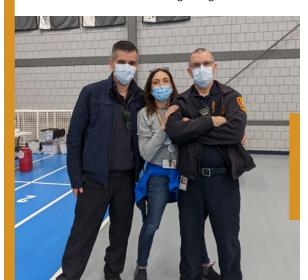
A flu vaccination campaign sign in Raymond Park.

at risk for COVID-19. Staff promoted and advertised both COVID-19 and flu vaccine clinics online and in materials including door hangers and park signs throughout City parks. The team continually updated content on both the City of Cambridge and CPHD's websites and social media, as well as writing articles for City newsletters. Information included updates on the virus and vaccine eligibility, local case data, mask information, and holiday safety guidance. Communications staff also worked with the Chief Public Health Officer and CPHD's clinical team to gather and prepare information that was presented at city council meetings. The team worked regularly with the City and CHA with COVID-19 communications, promoting vaccine clinics and testing and fielded a high volume of calls from the media as circumstances evolved rapidly and information needs changed. They also worked on other health topics including West Nile virus, mental health, substance use, emergency preparedness, and promoting CPHD events.

Emergency Preparedness and Community Resilience

Emergency Preparedness and Community Resilience staff played an important role in the operations of dispensing COVID-19 vaccines. The Resilience and Preparedness Manager worked with many partners across the City to locate and prepare sites for vaccines, including CambridgeSide mall, which hosted vaccine clinics for first responders.

The Resilience and Preparedness Manager (middle) with Cambridge Fire Department staff at a vaccine clinic at Cambridge Rindge and Latin School.



In collaboration with CPHD staff and city partners, the Manager also worked on clinics for shelter staff and people experiencing homelessness, seniors, residents in high risk areas for COVID-19, youth, and finally children ages 5-11. During one of CPHD's flu and vaccine clinics in October, the Community Resilience and Preparedness Manager led a drill with the purpose of evaluating CPHD's capability for rapidly dispensing emergency vaccines and medications. COVID-19 related work also included helping to support COVID-19 testing throughout the City with the Cambridge Pandemic Collaborative as well as organizing and delegating outreach activities with the Cambridge Community Corps (C3).

During heat emergencies, the Resilience and Preparedness Manager worked with the City to set up cooling centers and with the C3 to distribute materials to the general public. For National Preparedness Month, a social media campaign for the general public was developed to raise awareness and promote important safety tips during disasters and emergencies. In addition, the Resilience and Preparedness Manager worked on securing funding for emergency response and other public health endeavors.

Environmental Health

This year, environmental health staff shifted their work from developing new COVID-19 guidance to consulting with various organizations on how to keep their workers and patrons safe as well as make their buildings safer against COVID-19. As more was learned about how the coronavirus is transmitted, safety concerns also shifted away from cleaning surfaces to evaluating air flow quality and ventilation. Staff, in partnership with the Inspectional Services Department, served the dual roles as enforcers and advisers of the City's mask mandate that was lifted in the summer and reinstated in early September. Staff faced various challenges including public fatigue of mask wearing and ever-changing COVID-19 guidance. To help promote mask usage and provide more protection to frontline workers, Environmental Health staff worked with the Resilience and Preparedness Manager to provide KN95 masks to restaurant workers. Staff provided education and resources to the C3 members so in turn they could keep residents up-todate about COVID-19 and how to stay safe.

The Environmental Health team also facilitated the Cambridge COVID-19 Expert Advisory Panel (EAP), which held its last meeting in June. The EAP was

composed of local medical and subject matter experts whose academic, clinical, and technological perspectives helped inform and guide Cambridge's COVID-19-related response.

Staff also resumed most pre-pandemic regulatory obligations, inspections, and investigations. The team recruited three residents to the Cambridge Biosafety Committee.

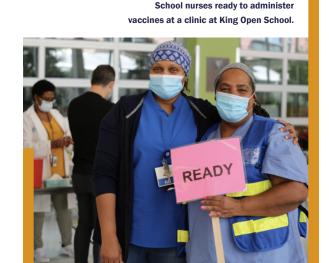
School Health

School health staff faced many challenges and worked tirelessly to keep Cambridge Public Schools (CPS) students and school staff safe. From January through June 2021, CPS was partially reopened and school health staff tested students and school staff twice a week. During the summer, school nurses helped with testing for summer programs held at CPS buildings and the City's youth centers. As schools opened full-time in the fall, school health staff prepared for the return of students and CPS staff. This included learning and implementing new Department of Elementary and Secondary Education Covid-19 testing protocols. This was in addition to their regular preparation, which entailed ensuring that students' vaccinations were up to date, organizing medications, documenting allergies, and managing chronic illnesses. School nurses

also cared for students whose mental health needs and issues were heightened during the pandemic. School health staff's main COVID-19 mitigation tasks were administering testing, promoting the COVID-19 vaccine for those who were eligible, and being part of the school's infection control team determining who could stay in school and who needed to stay at home. School nurses also kept up-to-date on COVID-19 information as they were the designated experts in their schools, providing education to students, parents, and staff. School nurses administered many of the COVID-19 and flu vaccines at CPHD's vaccine clinics and provided education to families about the importance of receiving the COVID-19 and flu vaccines.

2021 Cambridge Middle Grades and Teen Health Survey. This spring, CPHD and Cambridge Public Schools (CPS) conducted its Middle Grades and Teen Health Survey among students in grades 6-12. Given the challenges of the pandemic, the 2021 survey was shorter than in prior years and was designed as a "pulse check" to ascertain quickly the health status and risk factors present for Cambridge's students. The survey results were particularly meaningful as students continued to navigate the challenges of the pandemic and the return to full-time in-person learning. A total

of 2,029 students participated in the voluntary survey (990 middle school and 1,030 high school students), representing a 66% participation rate. The survey results showed that, like in many school districts across the country, the pandemic had major consequences for young people. Mental health among youth worsened during the pandemic, with increases in symptoms of depression and anxiety. Youth reported a decline in social connections. The survey results also showed that, similar to national trends, there was a sharp decrease in the proportion of students reporting current use of the most common substances: alcohol, marijuana,





Cambridge students with the Manager of the Cambridge Healthy Smiles Program.

cigarettes, and electronic vapor products. And although students reported less physical activity, fruit and vegetable consumption remained stable and consumption of sugar-sweetened beverages decreased. CPHD will continue to work with CPS as they seek ways to respond to these findings and support students, with a particular eye toward mental health.

Healthy Homes. The Cambridge-Somerville Healthy Homes, a childhood asthma program that included house visits, permanently closed due to the pandemic. The Healthy Homes coordinator now consults with school health staff regarding students with asthma in Cambridge schools.

Healthy Smiles. The Cambridge Healthy Smiles Program focuses on improving students' dental health and providing oral health education and free dental screenings for all first, third, sixth, and ninth graders in Cambridge Public Schools (CPS). Unable to provide dental screenings during the pandemic, dental hygienists called families, answering their concerns and informing them that dental offices were taking proper COVID-19 safety measures and it was safe to visit the dentist. The program also worked

remotely to teach oral health. The Cambridge Healthy Smiles Water Bottle Initiative continued to provide a water bottle to every first and third grader at 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. The program also added a larger bottle for every sixth and ninth grader. Approximately 2,200 total water bottles have been distributed to 1,200 to first and third graders and 1,000 to sixth and ninth graders. All students in the program were given oral health kits that encourage talking about oral health at home.



Cambridge students display their new water bottles.

Community Health Improvement Plan

The City of Cambridge's Community Health Improvement Plan (CHIP) is a five-year roadmap that guides departments and organizations on tackling residents' biggest health concerns. Now in its second year, the current CHIP focuses on community and social resilience; healthy eating and active living; and mental health.

In these early stages of the CHIP, the priority area workgroups are focusing on:

- Supporting COVID-19 testing and vaccination, especially among youth, seniors, and unhoused residents;
- Acquiring funding to build two neighborhood Resilience Hubs;
- Partnering with regional warmlines, which are phone numbers people can call to receive emotional support or resources to prevent a mental health crisis:

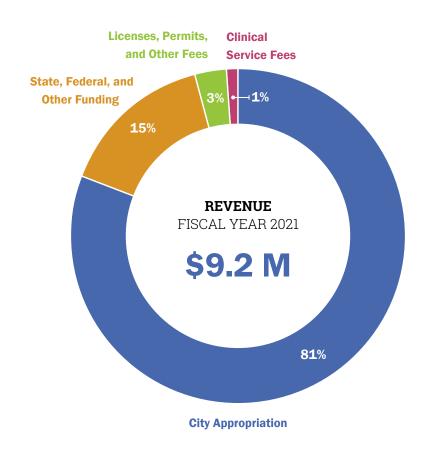
- Exploring opportunities to promote mental health services for the Cambridge community;
- Conducting assessments on local food pantries, physical activity, and equitable access to healthy food;
- Offering more affordable transportation options, such as reduced-price BlueBikes.

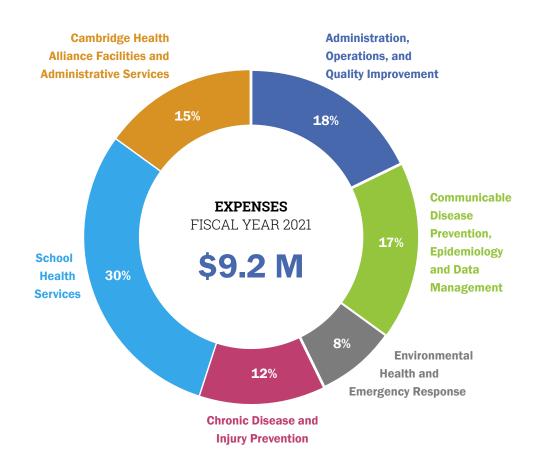
Additionally, the health department was awarded an Arts for Health grant through the Cambridge Arts Council. Funds from this grant were used to sponsor three local artists, who led COVID-safe events in Cambridge that highlighted the CHIP priority areas. Residents enjoyed a Brazilian celebration from Isaura de Oliveira and Akili James; senior-focused flamenco from Yosi Karahashi; and Chinese calligraphy and tai chi from Yung-Chi Sung.

The CHIP is supported in part through a grant from the Massachusetts Community Health and Healthy Aging Funds. Technical assistance is provided by the Metropolitan Area Planning Council.



Financial Overview





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

Thank You to Our Partners

We are grateful for the many exceptional partners who have continued to stand 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.

CITY OF CAMBRIDGE

Birth to 3rd Grade Partnership Cambridge Commission for Persons with Disabilities Cambridge Multi-Service Center Cambridge Public Schools City Manager's Office

Commission on Immigrant Rights and Citizenship Community Development Department

Conservation Commission

Department of Human Service Programs

Department of Public Works

Domestic and Gender-Based Violence

Prevention Initiative

Fire Department

Food and Fitness Policy Council

Find It Cambridge

Human Rights Commission

Inspectional Services Department

Law Department License Commission

LGBTO+ Commission

Participatory Budgeting Peace Commission

Police Department

Public Library

Substance Use Advisory Council

Traffic, Parking, and Transportation Department

Water Department

Women's Commission

CAMBRIDGE HEALTH ALLIANCE

COMMUNITY PARTNERS

Access: Drug User Health Program (AIDS Action Committee/Fenway Health) Academic Public Health Volunteer Corps

Agassiz Baldwin Community

CASPAR/Bay Cove Human Services

Cambridge Community Center

Cambridge Volunteer Clearinghouse

Cambridge YWCA

Cambridge Economic Opportunity Committee

Community Tracing Collaborative

East End House

Food For Free

Just-A-Start

Massachusetts Department of Public Health

Margaret Fuller Neighborhood House

Mount Auburn Hospital

Pro EMS

Ragon Institute

St. John the Evangelist Church Spaulding Hospital Cambridge

Y2Y

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CambridgeSide

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Cambridge Chamber of Commerce

East Cambridge Business Association

Harvard Square Business Association

Kendall Square Business Association

Trinity Property Management

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Please Note: The officials and members listed above are from the 2021 calendar year and were in office during the time this publication covers.





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

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