

FALL 2020

MGH HOTLINE



EXTRAORDINARY TIMES,
EXTRAORDINARY PEOPLE

INSIDE MGH'S COVID-19 RESPONSE





GLOBAL OUTBREAK, LOCAL CHALLENGE

In late December 2019, the Wuhan Municipal Health Commission in China reported an outbreak of a pneumonia of unknown cause. Nine days later, officials determined the acute respiratory virus to be caused by a novel coronavirus (2019-nCoV). Within days, members of the Massachusetts General Hospital's senior leadership team and the Center for Disaster Medicine began to closely monitor the situation and mapped out plans for the virus's possible spread across the globe, throughout the nation and right here in Boston.

MGH staff would spend the next several months working tirelessly – while facing new challenges and difficult, often emotionally draining situations. They cared for thousands of patients while learning new treatment options, supported their colleagues by ensuring all areas of the hospital were cleaned using the latest infection prevention methods and sought to make a difference through innovative research methods.

While this global pandemic has altered life in many ways, it also highlighted that all levels of Mass General staff can be counted on to rise to any challenge. In this special edition of *MGH Hotline*, we celebrate the more than 27,000 individuals who made such an incredible impact on our patients, our community and our colleagues during this time.

WE RECOGNIZE YOU. WE APPLAUD YOU. WE THANK YOU.

This special edition looks at the hospital's response efforts between January-June 2020.



ACTIVATION AND RAMP-UP

Agile and Able: MGH Labor Pool Activation

During the early stages of its COVID-19 response efforts, the Hospital Incident Command System (HICS) activated its labor pool, redeploying clinical, non-clinical and administrative support to help meet the changing dynamics raised by the coronavirus pandemic. From March 20 through May 7, 788 MGH employees filled 5,557 shifts as part of the general labor pool. Duties included N95 sticker distribution, vent listener and mask distribution/attestation programs. In the provider labor pool, 767 employees filled 4,925 shifts. Top redeployment areas were COVID-19 critical care units, COVID-19 general care units and the Emergency Department. As part of the Nursing Labor Pool, 596 nurses filled 15,093 shifts, helping to convert general care units into intensive care units (ICUs), pairing nurses to provide increased levels of care in ICUs, and redeploying ambulatory and research nurses to inpatient care.

SURGE STATS

1,820,230

isolation gowns

22,875

canisters of Super Sani-Cloths



JAN 1: The World Health Organization (WHO) sets up its Incident Management Support Team to deal with a possible global outbreak.

JAN 11: First potential patient evaluated in MGH Emergency Department (ED).

JAN 12: China publicly shares the genetic sequence of COVID-19.

JAN 13: First recorded case of COVID-19 outside of China is confirmed in Thailand.

JAN 21: First confirmed case in United States.

JAN 23: MGH introduces travel policy updates and discourages non-essential trips to China.

JAN 27: MGH's Hospital Incident Command System (HICS) activated.

JAN 30: WHO declares global emergency.

FEB 1: First confirmed COVID-19 case in Boston.

FEB 3: Special Pathogens Unit activated on Bigelow 9 for the first "Person Under Investigation" at MGH.

FEB 4: MGH begins screening patients with relevant international travel.

FEB 28: Countries in the MGH travel advisory and furlough policy are expanded to include Hong Kong, Macau, Italy, Iran, South Korea and Japan.

FEB 29: First COVID-19 death in the U.S.



A New Process to Reprocess

Amid the coronavirus surge, a national shortage of personal protective equipment (PPE) – including N95 respirators – was a major concern. To address this issue, the Reuse Working Group in the Mass General Brigham COVID Center for Innovation tested several decontamination methods for N95s, and found the best and safest option to be an FDA-approved, low-dose hydrogen peroxide vapor method that inactivates viruses and bacterial spores, while preserving fit and filtration and minimizing residue. After partnering with the Ohio-based Battelle company, a reprocessing system was set up at Assembly Row, allowing thousands of N95 respirators to be decontaminated and reused. This innovative reprocessing program has played a critical role in maintaining a stable supply of the hospital's PPE throughout the COVID-19 crisis.

SURGE STATS

More than
1,052
international, national
and local media outlets
feature MGH



MARCH 4: Five patients arrive at MGH's ED after attending an international conference in Boston. It would later be determined that 100 of the 175 attendees were infected by the coronavirus.

MARCH 6: The HICS Emergency Operations Center is activated in the Trustees Room.

All onsite and offsite conferences are canceled.

All patients presenting with viral respiratory illness are placed on contact-plus-droplet precautions.

Lunder Ambulance Garage is turned into a special ambulatory Respiratory Illness Clinic (RIC) to test conference attendees.

MARCH 10: Massachusetts Gov. Charlie Baker declares a state of emergency.

COVID-19 response labor pool launches, redeploying clinical, non-clinical and administrative support staff to meet the hospital's new and expanded needs.

MARCH 11: WHO declares COVID-19 a pandemic.

MARCH 12: MGH Visitor Policy limits the number of visitors on hospital campuses at any one time to promote physical distancing and limit possible exposure, and also defers non-essential care.

MARCH 13: President Donald Trump declares a national emergency.

MARCH 15: Gov. Baker issues an emergency order for all hospitals and ambulatory surgical centers to postpone or cancel any nonessential, elective invasive procedures, and also limits gatherings to 25 people and prohibits on-premise consumption of food or drink at bars and restaurants beginning March 17, effective through April 5.

MARCH 16: Remote work requirement issued for all staff able to do so.

MARCH 20: MGH Research Institute shuts down lab operations and limits human subject research, including clinical trials.

MARCH 22: New policy requires all staff – both clinical and non-clinical – to wear a face mask (surgical or procedural mask) that they must have on continuously, throughout their entire shift, while on the premises.

MARCH 23: Mass General Brigham Center for COVID Innovation created to help with the effort to coordinate and facilitate the development of new innovations that flatten the COVID-19 curve and protect and empower frontline clinical staff.

SURGE STATS

More than
\$28 million

in financial contributions from
37 states and 26 countries to benefit
the MGH Emergency Response Fund

More than
90,000 items

in-kind donations – including meals,
snacks, hats, flowers, gift cards,
shoes and socks



Turning Over a New Leaf on COVID Treatment

Patient Care Services (PCS) launched a COVID-19 Proning Team in early April after studies indicated that putting COVID-19 patients in a prone position – lying flat with the chest down and back up – would improve oxygen saturation, pulmonary mechanics and arterial blood gases. The Proning Teams – made up of 95 operating room nurses, operating room assistants, ambulatory physical therapists and occupational therapists – helped caregivers with the process of moving the patient to the prone position. The teams provided 24/7 assistance to caregivers, overseeing 450 proning events over 60 days from early April through June 8.

Staff from the Norman Knight Nursing Center and the PCS Office of Quality, Safety and Practice formed an ICU Support Team – comprised of experienced critical care clinical nurse specialists, nurse educators with critical care backgrounds and other staff with critical care experience – to provide clinical and educational support to general care nurses on units that had been converted to ICUs. The team members provided an ICU skills review/assistance for general care nurses who had been deployed to critical care, and helped with consultation, troubleshooting and rounding.

MARCH 24: Gov. Baker orders all non-essential physical workplaces and facilities to close.

Musician James Taylor and his wife, Kim, donate \$1 million to the MGH Emergency Response Fund.

MARCH 25: State issues emergency order to extend the closure of all public and private schools and non-emergency child care programs.

MARCH 25: 175 Cambridge St. RIC opens.

MARCH 30: All employees who work in clinical care settings required to self-monitor for symptoms of COVID-19 infection at the beginning of every shift.

APRIL 2: MGH Chelsea HealthCare Center opens a RIC to evaluate and treat high-risk patients with respiratory illness and test for COVID-19.

Telehealth Makes Connection Possible

In the height of the COVID-19 pandemic, some MGH patients were no longer able to come to the hospital for in-person appointments, however, many received ongoing care through virtual visits, or telehealth. More than 90 percent of scheduled appointments from March through May still took place, thanks to the efforts of the MGH Center for Telehealth. Since its formation in 2011, the program allows clinicians to virtually see patients, support the necessary physical distancing efforts, limit the use of PPE and reduce the patient load from inpatient units and the Emergency Department while still providing critical care for patients, keeping both patient and caregiver safe from unnecessary potential COVID-19 exposure.

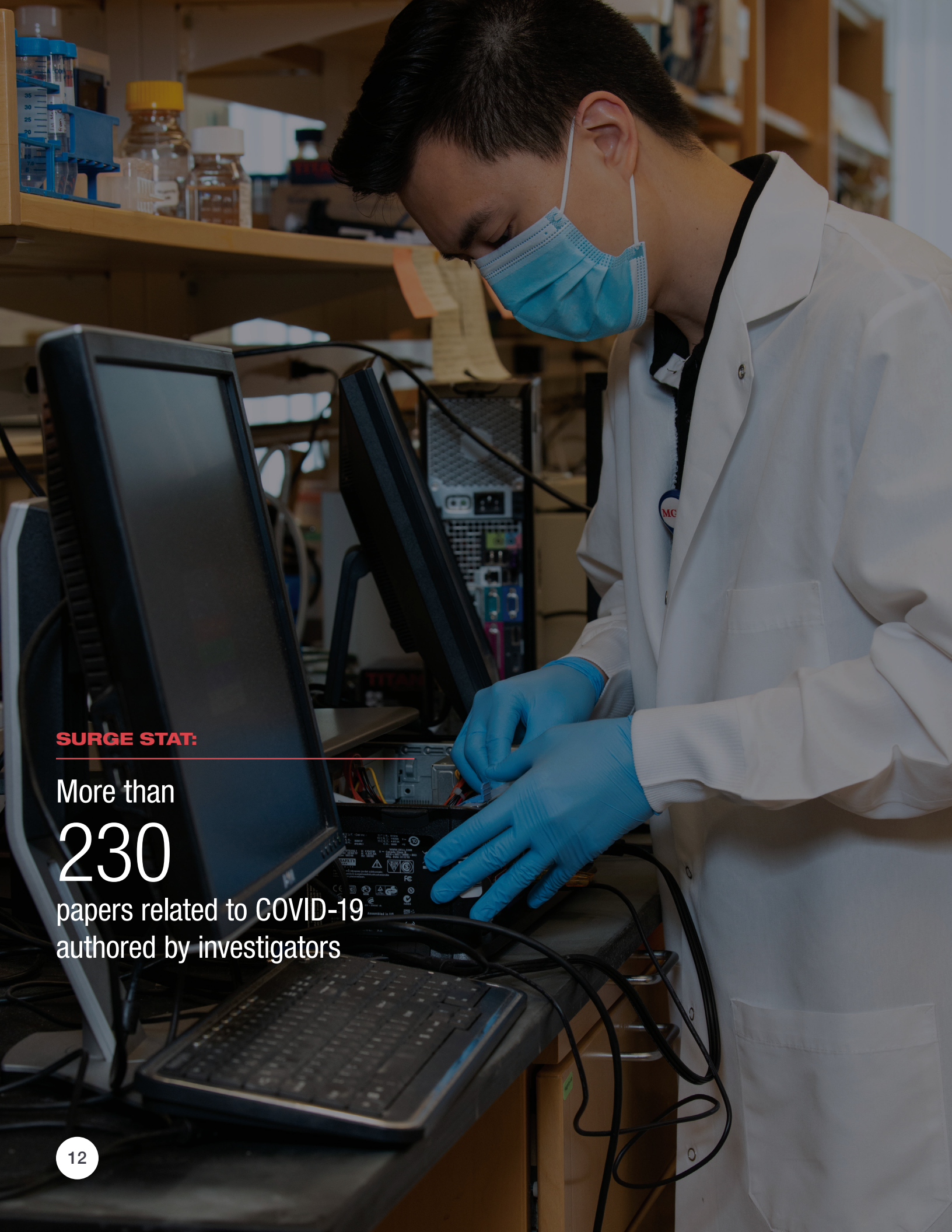


SURGE STATS:

6,412
employees fit-tested

51
training sessions

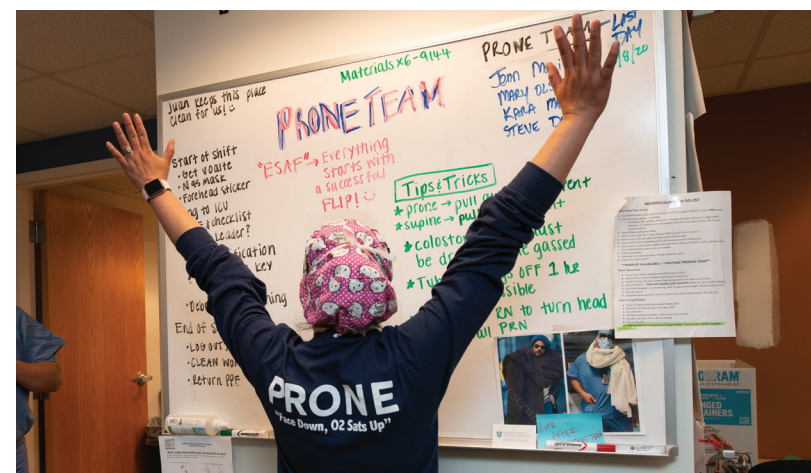
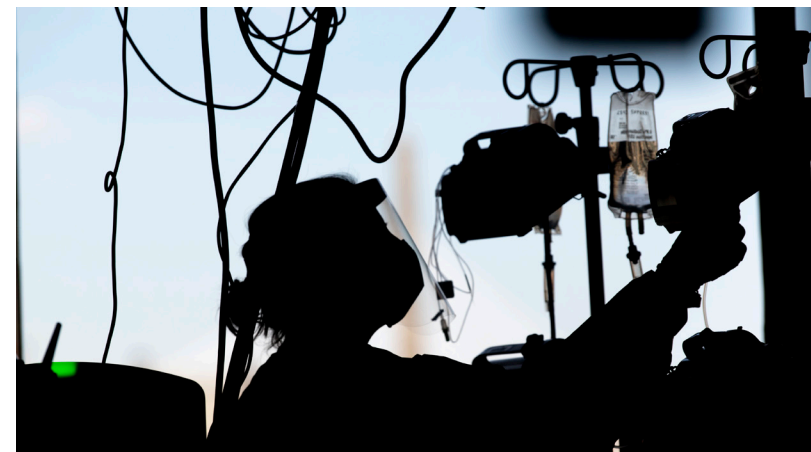




SURGE STAT:

More than
230
papers related to COVID-19
authored by investigators

SURGE AND RESPONSE ACTIVITIES



Ragon Research Leads to COVID-19 Antibody Presence

A research team led by Galit Alter, PhD, of the Ragon Institute of MGH, MIT and Harvard, developed and validated an enzyme linked immuno-assay (ELISA) test for SARS-CoV-2 antibodies in the blood. This laboratory-based test identified the presence of antibodies, but also the relative levels of each, which provides a more complete picture of the body's immune response to the disease. Following the development, ProterixBio, Inc. announced a licensing agreement with the hospital to manufacture the test for wide scale use.

APRIL 5: Occupational Health COVID-19 Call Line provides all test results and work clearances for employees.

APRIL 6: N95 Respirator Reuse Program launches to reprocess staff respirators, allowing for decontamination and reuse.

APRIL 9: Proning team is created to improve oxygen saturation, pulmonary mechanics and arterial blood gases in COVID-19 patients.

The MGH Environmental Health and Safety Department logs its busiest day for fit-testing – totaling 769 staff members – with the help of Peri-Operative staff who aided in the training sessions.

APRIL 10: Boston Hope – a 1,000-bed medical center inside the Boston Convention and Exhibition Center – opens, offering post-acute care for patients recovering from COVID-19 and for homeless individuals with coronavirus who do not require hospitalization.

APRIL 11: Some 3,000 N95 respirators are decontaminated and readied for reuse at the Battelle system facility – located near Mass General Brigham at Assembly Row in Somerville – using an FDA-approved, low-dose hydrogen peroxide vapor method to inactivate viruses and bacterial spores.

APRIL 13: MGH Chelsea offers expanded testing for anyone – not just MGH patients – who has symptoms. Spanish Language Care Group launches.

APRIL 15: The Quality Inn in Revere is turned into a facility to assist individuals who have COVID-19 and who need to be temporarily isolated from family and others while they recover. MGH helps with medical monitoring and behavioral health support.

MGH Chelsea introduces a hexapod – or personal protective booth – for providers to increase patient testing and to minimize the use of PPE.

APRIL 16: Routine Ambulatory Care for COVID-19 Patients (RACC) clinic opens in Yawkey to properly isolate and care for ambulatory and oncology patients who have, or are suspected to have, COVID-19.

APRIL 21: COVID-19 Bundled Response for Access (COBRA) Team launches, performing vascular and intestinal access procedures in ICUs to improve efficiency and safety of these procedures while decreasing health care provider exposure and preserving PPE.

APRIL 22: First day of color-coded sticker distribution to staff who wear N95 respirators or powered air-purifying respirators (PAPRs) to indicate their model and size.



Breaking Communication Barriers

The arrival of COVID-19 also brought a unique set of challenges for patients with intellectual and physical disabilities – including cognitive disability, communication barriers, sensory issues or behavioral concerns – and for patients for whom English is not their first language. Early on, the MGH Equity and Community Health COVID Response Team joined in a larger Mass General Brigham effort to ensure that patients, providers and employees were treated equitably and had access to necessary information during the COVID-19 pandemic. As part of this effort, the task force created a Multilingual, Disability, & Community Health Resource Repository, ensuring that all communications to patients and employees are available in a number of different ways. Simple, visual communication boards were created in multiple languages specifically designed to support communication during COVID 19. Many written communications – memos, posters and newsletters – also were translated into Spanish, Portuguese, Haitian Creole and Chinese. The MGH Disability Task Force also brought clear masks to the hospital for caregivers to use with patients who benefit from seeing a person’s mouth while they speak.

SURGE STATS:

18,113 patients

seen in the MGH RICs
from March-June

1,401 patients

seen in the MGH RACC clinic
from April-June

1,716 patients

seen at the at 125 Nashua Street
testing clinic in June



April 23 marks peak COVID-19 day with
389 COVID
positive patients,
217 in general care; 171 in intensive care

RECOVERY AND RECONCILIATION

MAY 6: Massachusetts order goes into effect requiring face masks in public places where social distancing is not possible.

MAY 18: Gov. Baker announces plan for phased reopening of state.

MAY 20: CORAL: COvid Risk **cAL**culator – and NEMO (pediatric **CORAL**) for pediatric patients – is introduced in Epic as an infection status assessment tool, replacing the Biothreats Infection Status pager.

MAY 27: Offsite locations resume elective procedures.

MAY 28: MGH Department of Medicine’s Center for Physician Well-Being and the Division of Palliative Care host a special memorial service recognizing the loss and grief of all types experienced during the pandemic.

MAY 29: The Quality Inn Hotel in Revere suspends new admissions and officially closes June 9.



Speaking from the Heart

After caregivers noted that COVID-19 was disproportionately impacting members of the Latino or Spanish-speaking community, 62 Spanish-speaking MGH clinicians – from trainees to the most senior clinical staff representing 13 departments and 13 countries – formed the Spanish Language Care Group. The supplemental group – which launched April 13 – worked closely with the MGH Interpreter Services Department 24/7 for seven weeks to assist teams caring for COVID limited English proficiency Spanish-speaking patients on surge floors, ICUs, the ED and Boston Hope. They helped relay condition updates and critical communication, educated patients and their families about their care plan, assisted in the daily rounding process, with admissions and discharges, and the consenting process both in person and virtually.

SURGE STATS:

4,000 bottles of hand sanitizer produced by the Gordon Center for Medical Imaging to address shortage, supplement growing hospital need



JUNE 1: Limited return to onsite research operations begins.

JUNE 2: Boston Hope releases the last of its more than 700 patients.

JUNE 3: Final day of MGH's HICS regular COVID-19 response meetings. Executive Committee on Clinical Operations assumes role of coordinating recovery operations.

JUNE 8: Final day for MGH Proning Team.

JUNE 12: Updated visitor policy announced, allowing for increased visitors in certain areas.

JUNE 15: COVID-19 testing-only site opens at 125 Nashua Street.

JUNE 30: Deadline to apply for Employee Grant Program for a grant of up to \$1,000 for employees experiencing financial hardship.



When Residents Become Patients, and Patients Become Guests

The Quality Inn Hotel in Revere turned into a 145-bed temporary housing facility for 150 patients recovering from COVID-19 who were unable to go home because it would be too difficult to isolate. “The Inn” – which began operations April 16 – aided in quarantining patients who reside in Chelsea or Revere – two of the hardest hit cities throughout Massachusetts with high COVID-19 infection rates. MGH staff provided 24/7 medical monitoring and behavioral health support at the hotel, which remained open for 60 days.

SURGE STATS:

1.3 million

pageviews on COVID-19 site on Apollo, the MGH intranet





We Can Do It Together!

Artist Antonio Reonegro created this special “We Can Do It Together” painting for the Mass General community, honoring its determination and grit during the COVID-19 pandemic. The background of the painting features hospital staff, while the edges of the canvas feature historical photos of the MGH. Reonegro is renowned for the artwork he produced for the Grateful Dead from 1988 to 1995, which is included as part of the Grateful Dead collection in the Rock & Roll Hall of Fame.

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REONEGRO