Open letter to Boston and Massachusetts government officials on …

[[a][b]UPDATED 3/14/2020]

Open letter to Boston and Massachusetts state government and public health officials on the need to more rapidly implement public health strategies to mitigate the COVID-19 epidemic

We are experts in infectious diseases and public health. We would like to express our growing concern regarding the expanding COVID-19 epidemic and provide encouragement and motivation to our government and public health officials to make some of the challenging decisions that will be required in the coming hours and days to protect the public, as outlined below.

First of all, we applaud the recent declaration of a public health emergency by Governor Baker.
We also acknowledge the tireless efforts of the professionals in public health departments throughout the state.

At the same time, we would like to underscore the importance of expanding the public health measures being taken to combat COVID-19 without delay. Our messages below are shaped by the epidemiological evidence and by observations regarding the consequences of delay that have surfaced elsewhere in the world during the course of this global epidemic. We will cite only a few critical pieces of evidence here.

First, robust historical evidence suggests that large-scale social distancing interventions during the 1918 influenza pandemic were effective in reducing peak and overall death rates in some cities in the U.S only if they were implemented quickly. For example, in Philadelphia, where social distancing interventions (bans on public gatherings, school closures, etc.) took place with 14 days greater delay compared to St. Louis, the peak excess mortality rate was 8 times higher and cumulative excess mortality was 2 times higher in the former compared to the latter city. Overall peak death rates were 50% lower and cumulative excess mortality 20% lower in cities that acted early to institute multiple social distancing interventions. After social distancing measures were relaxed, there was sometimes a resurgence of the epidemic; however, no city experienced a “second wave” of cases while these public health interventions were being continued. This study is relevant to our current epidemic not only because it highlights the effectiveness of social distancing interventions, but it also shows how crucial prompt intervention by local governments is in mitigating these epidemics – and that local governments need to act quickly and without hesitation, with even a few days making a difference.

Second, evidence from the global COVID-19 epidemic suggests that some countries, like Taiwan and Singapore, have been able to contain the epidemic with prompt implementation of identification, rapid testing, and quarantine of individuals at high risk. While the epidemic may be beyond containment in many places in the U.S., it is still possible that mitigation strategies (such as prompt diagnosis with home isolation and large-scale social distancing measures) may be effective in saving lives. For example, Japan, which instituted national closure of schools and other social distancing measures, has had a slower rise in total number of cases when compared to Italy or other European countries, and South Korea is beginning to see a decline in cases with similar measures, in addition to rapid testing and quarantine of affected individuals. We should gain hope and quickly apply lessons from countries where containment or stringent mitigation strategies seem to be working.

Third, alarming narratives of the challenges faced by healthcare workers have been emerging from Italy and Hubei province in China, where mitigation strategies were not implemented early or comprehensively enough. Doctors have often been working days and nights, seven days a week, and capacity for intensive care unit beds has been overwhelmed, leading to rationing of care. In a letter to The Lancet Global Health, Chinese health care workers issued a plea for help and described severe shortages of personal protective equipment for healthcare workers. While this letter was retracted under unclear circumstances, these descriptions are very similar to those emerging out of Italy and other countries. On March 3, 2020, the World Health Organization urged industry and governments to increase manufacturing of personal protective equipment (PPE) by 40% to meet rising global demand. Stocks of PPE available to Massachusetts hospitals are not unlimited; hence, more stringent containment and mitigation strategies should be adopted urgently by the

Therefore, we are highlighting gaps in our current response in the Commonwealth and emphasize critical interventions that we believe should be implemented urgently. The most important of these involve rapid implementation of social distancing strategies at broad social and institutional levels driven by proactive action by the government. We recognize that many of these interventions are already front of mind for our government and public health officials, but that they also face competing priorities including understandable concerns about the economic and social impact of these measures. In the face of these concerns, we have a simple message: **Don't hesitate, act**. For an infectious disease that can increase exponentially, the economic and social costs only increase with delay. At the same time, take proactive steps to minimize adverse consequences of these interventions, which have the potential to disproportionately harm the most marginalized in our society.

1. Limitation in access to testing for the virus remains a critical barrier to diagnosing and isolating individuals and to performing subsequent contact tracing to identify other exposed individuals. Testing capacity at the State Laboratory has rapidly been overwhelmed, leading to triage of testing to critically ill patients in many cases. Government officials need to be supporting and organizing local initiatives to validate and expand COVID-19 testing and facilitate plans to ensure that on-site testing capacity is available at all major hospitals within days to weeks. We should aim to achieve the goal of being able to rapidly test everyone in the state with concerning clinical findings and to access results within 24 hours or less. As soon as capacity is available to test everyone with clinical symptoms, we should continue to increase capacity with the goal of active surveillance, by which we mean testing contacts of affected individuals who may be asymptomatic or only have mild symptoms.

2. Decisions regarding cancellation or postponement of major conventions such as Ace Comic Con and the New England Cannabis Convention took place very slowly. While these events were ultimately postponed, these decisions seemingly relied on the good will of the organizers. Any such conventions drawing thousands of people to Boston in the coming weeks should be proactively identified and forced to cancel or postpone by the government. In addition, wavering on postponement of the Boston Marathon is sending mixed signals to the public – the Marathon should be immediately canceled.

3. More active efforts should be made to ensure that people avoid congregate settings such as theaters, concerts, and houses of worship, to name a few. Such efforts will involve working with local businesses, such as theaters, restaurants, and gymnasiums, to minimize the adverse economic impact of these initiatives, which may help to facilitate active engagement on the part of the business community. Public health officials should not assume that such businesses will take these drastic measures voluntarily. Universities are already broadly moving towards teaching nearly all classes virtually, which is a move we fully endorse.

4. Closing schools may be the hardest decision faced by government and public health officials. Current evidence is that it is unusual for children to become very ill with COVID-19, but there is no reason to think they cannot contribute to the chain of transmission to others. Robust evidence is not currently available to know how much children contribute to the transmission of COVID-19 to individuals who are at higher risk for poor outcomes (e.g., the elderly) – but we know that children contribute to transmission of influenza, a similar disease. Thus, schools *should be closed* when there is evidence of community transmission or even a few cases of individuals identified with severe illness in a given location. Identification of individuals with severe illness usually suggests that there has been days to weeks of community transmission. *Closing schools for a day or two for disinfection procedures, as is currently happening, could lead to a false sense of security*. Closure of schools even before there is evidence of community transmission in a location or in the Commonwealth more broadly should also be a strong consideration in light of the fact that limitations in testing have hindered our ability to know whether community transmission is happening in the first place.

Efforts should be taken to mitigate the adverse impacts of school closures, such as provision of monetary support to children and families who rely on free or subsidized school lunch programs. For many children, staying at home may mean an empty house because the adults have to work. Creative solutions, like guaranteeing some level of income to parents staying at home, or arranging a rotating system of adults to supervise at-home children, may be needed. Decisive actions by the Commonwealth, *now*, to support families whose children must stay home, will minimize the social costs of school closure and maximize the potential benefits.

higher risk for mortality. The state prison health system is run by WellPath and the Department of Corrections Health Services. Unified protocols need to be created to: (a) reduce the risk of transmission in every prison facility, including rapid testing for both influenza and COVID-19; (b) ensure the safety of inmates and staff, as reductions in staff may be inevitable; (c) set up isolation and quarantine spaces for infected individuals; (d) provide PPE for staff and health workers in the prisons; and (e) create protocols for managing inmates who become infected, especially when health facilities in the community may be no longer able to take patients. Strong consideration should be given to suspending programs and family visits; however, the greatest focus should be placed on potential transmission – both in and outside of prisons – by correctional officers who go in and out of these facilities every day. They should be educated, screened frequently for symptoms, and checked for fevers with devices similar to the ones being used in airports at this time. The Department of Public Health needs to take a leading role in protecting the safety of inmates and staff in these settings.

6. Public messaging should be aimed at encouraging engagement with these measures by all major institutions (e.g., universities), business establishments, and individuals as part of a broad cooperative societal effort against this epidemic. The message should be that we are all in this together. We should also be preparing people for the possibility of medium- to long-term implementation of some these social distancing strategies.

7. The capacity of local government and public health officials will be quickly overwhelmed as the epidemic expands, and the government should actively seek the voluntary help of businesses and institutions across the state. However, the government should take the lead in mobilizing this support from all sectors of society rather than allowing individuals and institutions to work on these problems in a siloed manner. We acknowledge that mechanisms currently exist for emergency communication and planning among hospitals and other health institutions in Boston and Massachusetts more broadly. However, creation of a new task force may be needed to rapidly address the shortfall in availability of testing; existing efforts to rectify this situation should be made more transparent to providers on the frontline. The task force could expedite communication across hospitals and outpatient centers in the state about this specific issue, so that all of these institutions can coordinate to improve testing capacity. Similarly, there is a strong possibility that hospital and intensive care unit capacity will be rapidly overwhelmed, and hospitals will need to be coordinating on these problems in real time. Please reach out to our hospitals, universities, and businesses for our expertise, support, and resources. We would be happy to contribute to these broader coordinated efforts against this epidemic.

With Boston’s wealth of medical and scientific expertise, we should aim to be the model for everyone else in the U.S. to follow. Let us take action now – before it is too late. Every day matters.

We welcome other health professionals and public health specialists who agree with this letter to sign onto this statement.

Signatories

Aviva Must, Ph.D.
Morton A. Madoff Professor and Chair
Dept. of Public Health & Community Medicine
Dean, Public Health & Professional Degree Programs
Tufts University School of Medicine

Helen W. Boucher MD, FACP, FIDSA
Chief, Division of Geographic Medicine and Infectious Diseases
Director, Tufts Center for Integrated Management of Antimicrobial Resistance (CIMAR)
Professor of Medicine
Tufts Medical Center

David R. Snydman, MD, FIDSA
Vice Chair for Research, Department of Medicine
Tufts Medical Center
Professor of Medicine
Tufts University School of Medicine

Director, Tufts Center for Global Public Health

Jeffrey K. Griffiths, MD, MPH&TM
Professor, Dept. of Public Health and Community Medicine
Tufts University School of Medicine
Attending Physician
Division of Geographic Medicine and Infectious Diseases
Tufts Medical Center

Michael Jordan, MD, MPH
Assistant Professor of Medicine, Dept of Public Health and Community Medicine
Tufts University School of Medicine
Attending Physician
Division of Geographic Medicine and Infectious Diseases
Tufts Medical Center

Ramnath Subbaraman, MD, MSc, FACP
Assistant Professor, Dept. of Public Health and Community Medicine
Tufts University School of Medicine
Attending Physician, Division of Geographic Medicine and Infectious Diseases
Tufts Medical Center
Associate Director, Tufts Center for Global Public Health

Olaf Dammann, MD, PhD
Professor & Vice Chair, Dept. of Public Health & Community Medicine
Director, MS Health Informatics & Analytics
Associate Dean of Academic Affairs, University College
Tufts University

Tamsin A. Knox, MD, MPH
Associate Professor of Medicine
Tufts University School of Medicine

Geneve M. Allison, MD, MSC, FACP
Associate Professor of Medicine, Tufts University School of Medicine
Attending Physician, Division of Geographic Medicine and Infectious Diseases
Tufts Medical Center

Susan Koch-Weser, ScD
Associate Professor, Department of Public Health and Community Medicine
Associate Director of Curriculum and Program Planning (MPH)
Tufts University School of Medicine

Cheleste M. Thorpe MD, FIDSA
Attending Physician, Division of Geographic Medicine and Infectious Disease
Tufts Medical Center
Associate Professor
Tufts University School of Medicine

Roberto Viau Colindres, MD
Assistant Professor, Division of Geographic Medicine and Infectious Diseases
Tufts Medical Center

Ylisabyth Bradshaw, DO, MS
Assistant Professor
Department of Public Health and Community Medicine
Tufts University School of Medicine

Tine Vindenes, MD, MPH

Sabrina Kurtz Rossi
Assistant Professor
Tufts University School of Medicine

Carolyn L. Rubin
Assistant Professor
Tufts University School of Medicine

Richard Glickman-Simon, MD
Assistant Professor, Dept. of Public Health and Community Medicine
Tufts University School of Medicine

Ndidiamaka Amutah-Onukagha, PhD, MPH, CHES
Associate Professor
Dept. of Public Health & Community Medicine
Tufts University School of Medicine

Dominique Michaud, ScD
Professor
Department of Public Health & Community Medicine
Tufts University School of Medicine

Jose A. Caro, MD
Assistant Professor, Tufts University School of Medicine
Geographic Medicine and Infectious Diseases
Tufts Medical Center

Thomas J. Stopka, PhD, MHS
Associate Professor
Department of Public Health and Community Medicine
Clinical and Translational Science Institute
Tufts University School of Medicine

Laura Corlin, PhD
Assistant Professor
Department of Public Health and Community Medicine
Tufts University

Janet Walton, MA
Assistant Dean, Public Health & Professional Degree Programs
Tufts University School of Medicine

Kimberly Dong Breen, DrPH, MS, RDN
Assistant Professor
Tufts University School of Medicine

Thomas Land, PhD
Associate Professor, Division of Clinical Informatics and Computational Medicine
University of Massachusetts Medical School
55 N Lake Ave
Worcester, MA 01655

David Stone, MD
Associate Professor Medicine, Tufts University School of Medicine
Attending Physician, Tufts Medical Center and Lemuel Shattuck Hospital

Honorine Ward, MBBS
Professor of Medicine
Tufts University School of Medicine

Professor of Medicine and Director of Research
Division of Clinical Informatics and Computational Medicine (CICM)
Department of Medicine
University of Massachusetts Medical School
55 Lake Avenue North, Worcester, MA 01655

Dawn Sauma, MSW, LICSW
Co- Executive Director
Asian Taskforce Against Domestic Violence
Boston, MA 02112

Warren J. Ferguson, MD
Professor of Family Medicine and Community Health
University of Massachusetts Medical School
55 Lake Avenue North, Worcester, MA 01655

Linden Hu, M.D.
Professor of Medicine and Microbiology
Vice Dean for Research
Tufts University School of Medicine
Boston, MA 02111

Brian Chow, MD, FAAP
Director, Infectious Diseases Fellowship Program
Tufts Medical Center
Assistant Professor of Medicine
Tufts University School of Medicine
Boston, MA

Lindsay Rosenfeld, ScD, ScM
Scientist & Lecturer, Brandeis University, Heller School for Social Policy & Management
Fellow, Children's Hospital/UMass-Boston, Institute for Community Inclusion
Lecturer, Harvard T.H. Chan School of Public Health, Department of Social & Behavioral Sciences

Regina LaRocque, MD MPH
Division of Infectious Diseases
Massachusetts General Hospital
Associate Professor of Medicine
Harvard Medical School
Boston, MA

Jason Harris, MD MPH
Chief, Division of Pediatric Global Health
Massachusetts General Hospital
Associate Professor of Pediatrics
Harvard Medical School
Boston, MA

Denise Jacobson, PhD MPH
Senior Research Scientist
Harvard Chan TH Chan School of Public Health
Boston, MA

Andrea Ciaranello, MD, MPH
Division of Infectious Disease
Massachusetts General Hospital
Associate Professor of Medicine
Harvard Medical School
Boston, MA

Associate Director, Hospital Medicine Unit
Boston Medical Center
Boston, MA

Virginia Triant, MD, MPH
Division of Infectious Disease
Massachusetts General Hospital
Assistant Professor of Medicine
Harvard Medical School
Boston, MA

Erika Crable, MPH
Research Fellow
Department of Medicine
Boston University School of Medicine
Boston, MA

Felicia Patch, MD
Hospital Medicine Unit
Boston Medical Center
Boston, MA

Anna L. Goldman, MD, MPA, MPH
Assistant Professor
Department of Medicine
Boston University School of Medicine
Boston, MA

Janet Forrester, PhD (Infectious Disease Epidemiology)
Associate Professor
Department of Public Health & Community Medicine
Tufts University School of Medicine

Margie Skeer, ScD, MPH, MSW
Weiner Hailey Family Professor
Associate Professor
Department of Public Health and Community Medicine
Tufts University School of Medicine

Ellen Seely, MD
Division of Endocrinology
Brigham and Women's Hospital
Professor Harvard Medical School

Kathryn Rexrode, MD, MPH
Division of Women's Health
Brigham and Women's Hospital
Associate Professor of Medicine, Harvard Medical School

Melissa Mahr, MD
Internal Medicine
Reliant Medical Group
Southborough, MA

Ekaterina Pivovarova, Ph.D.
Assistant Professor
Department of Psychiatry
University of Massachusetts Medical School

Neonatal/Perinatal Medicine (retired)
Rockville, MD

Ray Qian, M.D.
Assistant Professor
Department of Medicine
Boston University School of Medicine

Kelly Reuell, NP
Occupational Health
Mount Auburn Hospital
Cambridge, MA

Brenna Miller
MPH Candidate
Tufts University School of Medicine
Class of 2021

Signe Peterson Flieger, PhD, MSW
Assistant Professor
Department of Public Health and Community Medicine
Tufts University School of Medicine

Brita E. Lundberg, M.D.
Lundberg Health Advocates
Brookline, MA 02446

Elizabeth Rocco M.D.
Family Practice
Greater Lawrence Family Health Center
Lawrence, MA

Laura Kogelman, MD
Associate Professor of Medicine
Tufts University School of Medicine
Attending Physician,
Division of Geographic Medicine and Infectious Diseases

Klemens Meyer, MD
Professor of Medicine, Tufts Univ Schl Medicine
Director of Dialysis Services, Tufts Med Center
Medical Director, Dialysis Clinic Inc Boston
Medical Director, Dialysis Clinic Inc Somerville

Rachel Simmons, MD FACP
Section of Infectious Diseases
Assistant Professor of Medicine
Boston Medical Center
Boston, MA

Paul Duncan, MD
Assistant Professor of Medicine
Attending Physician, Division of General Medicine
Tufts Medical Center

Teresa T. Fung, ScD, RD
Professor of Nutrition, Simmons University
Adjunct Professor of Nutrition, Harvard TH Chan School of Public Health

Harvard T.H. Chan School of Public Health

Rajeev Malhotra, MD MS
Associate Medical Director, Cardiac ICU
Cardiology Division
Massachusetts General Hospital
Assistant Professor of Medicine
Harvard Medical School
Boston, MA

Amy Fogelman, MD
Internal Medicine
Beth Israel Lahey Health
Boston, MA

Magen Price, FNP-BC
Adult Medicine
East Boston Neighborhood Health Center
Boston, MA

Elise Laflamme MD
Assistant Professor, Tufts University School of Medicine
Greater Lawrence Family Health Center
Lawrence, MA

Elizabeth J. Quinn, MD
Family Physician, Lynn Community Health Center
Assistant Professor, Tufts University School of Medicine

James T. Noble, M.D., FACP
Section Chief, Infectious Diseases
Medical Director, Infection Prevention
Concord Hospital/Capital Region Health Care
Concord, NH 03301

Jenifer RQW Siegelman, MD,MPH
Radiologist
Newton,MA 02458

Heather Finlay-Morreale MD
Assistant Professor of Pediatrics
Univ of Massachusetts Medical School
Worcester, MA

Kara Keating Bench, MD, MPH
Family Physician, Medical Director
Lynn Community Health Center
Lynn, MA

Brianne Edwardsberry, MSW, LICSW
Clinical Social Worker
Massachusetts Department of Public Health
Boston, MA

Richard Serrao, MD
Clinical Associate Professor of Medicine

VA Boston Healthcare System

Rachelle Archard, RN BSN
Primary Adult-Gero DNP, expected 6/2020

Pratibha Ranganna, MD
Assistant Professor, Internal Medicine
UMass Memorial Medical Center
Worcester, MA

[a]The governor set the number to 250 for public gatherings. Shouldn't it be set to no more than 20 people based on the research from 1918. … A different story played out in St. Louis, just 900 miles away. Within two days of detecting its first cases among civilians, the city closed schools, playgrounds, libraries, courtrooms, and even churches. Work shifts were staggered and streetcar ridership was strictly limited. Public gatherings of more than 20 people were banned.

[b]And the Boston Marathon should be cancelled. Having it in September would seem to be extremely risky. If history repeats, the virus will come back stronger in the fall.