

April 7, 2020

The Honorable Muriel Bowser  
Mayor of the District of Columbia  
John A. Wilson Building  
1350 Pennsylvania Avenue, NW  
Washington, DC 20004

Dear Mayor Bowser:

According to the U.S. Centers for Disease Control and Prevention (CDC), 94% of Covid-19-related U.S. deaths through March 28 occurred in people with one or more underlying health conditions. The report confirmed observations in China and Italy linking coronavirus mortality to the co-occurrence of diabetes, hypertension, smoking, chronic lung disease, coronary artery disease, cerebrovascular disease, or kidney disease. Apart from increasing the risk of Covid-19-related death, these conditions strain hospital resources. ***In the CDC data, the likelihood of a Covid-19-related ICU admission was 2.2% to 2.4% in those without pre-existing medical conditions and 13.3% to 14.5% in those with such conditions.***

Despite these stark facts, health authorities have remained largely silent about underlying conditions. There has been no call to reduce coronavirus mortality by bringing diabetes or blood pressure under better control, or even to stop smoking. The “flatten the curve” strategy calls for handwashing, social distancing, and masks to slow the progression of the virus through the population. When these steps fail, as they often do, underlying conditions set the stage for rapid progression to a fatal outcome.

One can legitimately ask whether improving underlying health conditions would reduce the toll of a viral infection. We simply do not know. But given the dire mortality predictions, we must make every effort to improve the odds of survival in our patients, and underlying conditions are a critical factor.

We ask that your office include the following steps in its recommended strategies for individuals to protect themselves. Each is expected to work rapidly enough to have a significant public health impact in the current pandemic.

1. First, quit smoking and vaping. Smoking cessation improves lung function and reduces sputum neutrophil counts within 6 weeks. Currently 1 in 7 American adults smokes; vaping in the preceding 30 days was reported by 16% of adolescents aged 16-19 in the US in 2018. To the extent that influenza may serve as a model for Covid-19, influenza infections occur five times more often in smokers than nonsmokers.
2. Second, optimize medications. Adherence to medication regimens for diabetes, hypertension, dyslipidemia, and asthma is often poor, leading to poor clinical outcomes. What can and should be

done rapidly is for individuals on medications to consult with their primary care physicians to re-evaluate pharmacotherapy, restore lapsed prescriptions, and treat to target now.

3. Third, implement diet changes. Nutritional changes have rapid effects on blood pressure, lipids, and glycemic control, without the risks of pharmacotherapy. In the Dietary Approaches to Stop Hypertension (DASH) study, increased vegetable and fruit consumption, along with reduced meat and fat intake reduced blood pressure within two weeks. Low-fat plant-based diets have also been shown to reduce body weight, blood glucose, and plasma cholesterol concentrations. Some evidence suggests that diet changes, particularly avoiding dairy products, may also rapidly improve pulmonary function in individuals with asthma.

We are happy to recommend helpful resources for implementing the above three steps. We also request that individuals with expertise in underlying medical conditions be consulted for policy statements related to reducing Covid-19 mortality.

We have no time to waste. Quitting smoking, optimizing our medication doses, and dietary changes will not shield us against the virus; that is what hygiene and social distancing are for. But they will ameliorate the underlying conditions, and that may influence who lives and who dies.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Pineda MD".

J. Desiree Pineda, MD, FACP  
President, Medical Society of DC