LETTERS TO THE EDITOR

Thermal Screening in COVID-19: Why Is It Commonplace?

To the Editor: Coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2, disrupted human life as we know it and brought us to a standstill in a matter of months. Considering fever is one of the earliest and most common symptoms, temperature-based screening promptly became the focus for identifying infected cases and for checking the spread of the virus.1 This was, and still is, being performed using noncontact infrared thermometers and/or thermal scanners at entry/exit points (eg, airports) and doorways to different establishments such as hospitals, workplaces, grocery stores, and restaurants. This was meant to be applied as part of a composite program in combination with self-reporting of relevant symptoms, contact, and travel history. The idea was that people who have a rise in body temperature be treated as a suspected case of COVID-19 and be isolated until definite test results are obtained.

Per contra, what seemed like a simple yet effective measure to identify cases then has now transpired to be a futile endeavor. More than a year into the pandemic, we now know that almost half the patients with COVID-19 do not have fever.2 Consequently, asymptomatic and presymptomatic cases might go undetected. Among cases that present with fever, the use of antipyretic drugs (which is oftentimes not self-reported) can result in false-negative results. Furthermore, readings obtained with these devices are influenced by a myriad of factors. These include the person’s age, sex and race, alcohol consumption, application of cosmetics, and physical activity preceding measurement. Environmental factors such as subject-to-sensor distance, ambient temperature, and humidity also affect the readings.3 Such factors may lead to an underestimation of febrile cases, leading to a false sense of security; conversely, it may also overestimate the number of febrile patients generating unnecessary further testing, increased cost, and undue stress for individuals and authorities involved.4

Nowadays, temperature checks have come to be a daily ritual for many of us. Although not particularly resource intensive, the propensity to miss a substantial proportion of the cases and the multitude of variables that could render the results unreliable compel us to consider the cost-benefit of this screening measure. A review of the evidence of noncontact thermal screening for identifying cases of COVID-19 concluded that thermal screening is ineffective in limiting the spread of severe acute respiratory syndrome coronavirus 2.4 With little discernible benefit, it begs the question: Why do we allow thermal screening to be commonplace?

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COVID-19 Vaccine Effectiveness in a Diverse Urban Health Care Worker Population

To the Editor: Whereas there is emerging, real-world research investigating COVID-19 vaccine effectiveness (VE) on health care workers (HCWs),1,2 specific VE data from hospital settings with diverse urban employee populations are lacking. In addition, most studies have not controlled for demographic characteristics, including race and background community COVID-19 incidence, which are risk factors among HCWs.3 We investigated the COVID-19 VE among employees in our ethnically diverse community health care system in Massachusetts (44% of our HCWs are non-White) during its initial immunization campaign. The HCWs of the system were retrospectively included from the beginning of a COVID-19 vaccination program (December 16, 2020) until March 31, 2021. Those with a prior COVID-19 infection before December 15 were excluded. The Occupational Health department of the system ran a COVID-19 screening and testing referral program for workers, consistently throughout the study period. A master database comprising the demographic characteristics,