



Testimony

of

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before the

New York City Council Committee on Health

on

Cooling Centers

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Good morning, Chair Schulman and members of the Health Committee. I am Carolyn Olson, Assistant Commissioner for Environmental Surveillance and Policy at the New York City Department of Health and Mental Hygiene. On behalf of Acting Commissioner Morse, thank you for the opportunity to join my colleague from New York City Emergency Management to testify today on this legislation concerning cooling centers.

Extreme heat events are, on average, the most dangerous type of extreme weather, killing hundreds of New Yorkers every year. As described by First Deputy Commissioner Farrell, the City activates the heat emergency plan by relying on the National Weather Service's science-based advisories, issued based on their highly specialized forecasted heat index. Advisories recommend that people most vulnerable to heat impacts use their home air conditioner if they have one, or if not, that they go to an air-conditioned place, such as a cooling center, shopping center, or the home of a friend. These advisories also urge the public and service providers to check on people who are vulnerable to heat-related health impacts, especially those without residential air conditioning, who have a chronic physical or mental health problem, or are elderly.

There are several reasons that cooling centers are an important component of the City's multi-pronged response to heat emergencies. First, health risks from extreme heat are significant. While seasonal hot weather contributes to heat stress, when the heat index reaches about 95 degrees and above, the risk of serious illness or death increases rapidly. Second, heat stress is cumulative. Consecutive days of extreme heat compound the risk as the body's temperature rises and dehydration worsens. Third, our epidemiologic research has shown that lack of air conditioning at home during extreme heat is the strongest risk factor for heat stroke death. About 90 percent of adult New Yorkers have home air conditioning and about 75 percent of vulnerable adults report using home air conditioning often during extreme heat. But about 80 percent of the victims of lethal heat stroke die at home, almost always without working residential cooling. For all these reasons, cooling centers are a key part of an extreme heat public health protection strategy.

I will turn now to the legislation's proposal to open cooling centers on days with air quality health advisories, regardless of the forecasted heat index. The Health Department concurs with NYCEM in our appreciation for the intent behind this proposal, as well as in our concerns with its implementation and potential impacts. While well-intentioned, this proposal is unlikely to reduce pollution exposure and could have the opposite effect – increasing it in some cases – while placing a heavy financial burden on the City. When there is extreme heat, cooling centers definitely lower

people's heat exposure because of air conditioning, which allows for recovery from heat stress. As little as a few hours in a cool environment can decrease a person's risk of poor health outcomes due to heat. In contrast, any indoor location during an air quality event will reduce a person's exposure to air pollution, so we tell New Yorkers to limit their time outdoors as much as possible. When the air quality is poor, a person's short-term exposure to pollution could be increased by any time spent traveling outdoors – including to visit a cooling center. In addition, it is much harder to ensure that a cooling center's air quality is any better than in a person's home. The center they visit may have poorly designed ventilation or be in a more polluted location than their home or workplace, like near a high-traffic road.

After the air quality event from wildfire smoke in 2023, the City developed a detailed emergency response protocol for any similar events. An important component of this preparation was the development of clear, evidence-based health messaging for New Yorkers based on the EPA's Air Quality Index – or AQI. The Health Department provides guidance for the general public and for child care and school settings on our website for air quality events. The primary message we want to deliver is that short-term ambient air pollution exposure is driven by two main factors – the amount of time spent outside and people's level of activity when they are outdoors. During lower-level advisories for people who are sensitive to air pollution, we do not advise changes in behavior for the general public. Once the AQI reaches 150 it can be unhealthy for anyone and our messaging focuses on staying indoors and limiting any strenuous activity outside. Opening public cooling centers as “clean air” centers would conflict with the clear, evidence-based messaging to stay home.

Lastly, the health effects from short-term air pollution exposure increase gradually, in contrast to the rapid rise in illness and death associated with extreme heat. The best way to protect vulnerable New Yorkers from air pollution will be to continue to implement programs to reduce levels of air pollution in the city and, thereby, decrease the chronic exposures that have the greatest impact on health.

Thank you for the opportunity to testify. First Deputy Commissioner Farrell and I would be happy to take questions.