CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON HEALTH

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HELD AT: COUNCIL CHAMBERS - CITY HALL

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Chairperson

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SERGEANT AT ARMS: This is a microphone check for the Committee on Health, located in Chambers, recorded on September 27, 2023 by Nasley
Petuvie(SP?).

SERGEANT AT ARMS: Good afternoon. If everyone may please just have a seat. We are getting ready to begin.

Good afternoon and welcome to today's New York
City Council Hearing for the Committee on Health. If
you wish to submit testimony, you may at
testimony@council.nyc.gov. Once again, that's
testimony@council.nyc.gov. At this time, please
silence all electronic devices. Just a reminder, no
one may approach the dais at any point during this
hearing. Chair, we are ready to begin.

CHAIRPERSON SCHULMAN: [GAVEL] Good afternoon everyone. I am Council Member Lynn Schulman, Chair of the Committee on Health. I want to thank all of you for joining us at today's oversight hearing and I just want to make mention, I want to thank the Admin for not only showing up on time but showing up early. So, kudos to you.

The purpose of today's hearing is to examine and discuss the health impacts of air quality and extreme

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heat on New Yorkers. The pandemic and more recent wildfire emergencies have placed renewed urgency on monitoring and protecting the air we breathe both outdoors and indoors.

This Committee has been laser focused on ensuring that New York City employees effective public health strategies to address future air quality emergencies and our work continues today with a focus on improving indoor air quality. Americans spend approximately 90 percent of their time indoors where the concentrations of some pollutants are often two to five times higher than typical outdoor concentrations.

Health effects associated with indoor air pollutants include irritation of the eyes, nose and throat, headaches and dizziness, fatigue, respiratory issues and cancer. Theses pollutants can include radon, carbon monoxide, bacteria such as Legionella, dust mites, mold, lead paint particles, and tobacco smoke. Research shows that low-income families in communities of color bear the disproportionate impact of poor indoor air quality.

According to the Rocky Mountain Institute, commercial and residential buildings are responsible

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for approximately 18,300 early deaths and \$205
billion in health impacts. One third of the health
burden from stationary sources in the United States.
Studies suggest that indoor concentrations of air
pollutants are increasing driven by factors such as
the types of chemicals and home products, inadequate
ventilation, hotter temperatures, and higher
humidity.

Meanwhile, according to experts from the Johns Hopkins Center for Health Security, many infectious diseases including COVID-19, the flu, RSV and measles are spread through airborne transmission, which occurs far more easily in indoor environments and yet, even though we spend so much of our lives indoors, we invest very little in monitoring indoor air quality. That's why we are considering four important pieces of legislation today that seek to protect our public-school children and staff, city workers, residents and commercial tenants from the many dangers of poor indoor air quality.

The data is clear, poor indoor air quality is dangerous to our health and wellbeing and we must stop collecting data and establishing standards to

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create healthier indoor environments for all New
Yorkers.

Today, we will also be discussing the impacts of extreme heat on New York City. Heat waves are now a leading cause of weather-related deaths in the United States and New York City is expected to experience an average of two heat waves per year with a jump to as many as seven per year by 2050.

Additionally, the number of days with temperatures exceeding 90 degrees Fahrenheit could triple by 2050. Long term exposure to hotter temperatures can have significant impacts on human health. Studies have shown that sustained heat exposure is associated with chronic health conditions, such as diabetes, kidney stones, cardio vascular disease, and obesity.

Extended periods of high day and night time temperatures create cumulative stress on the human body and heat waves can disrupt sleep, impair cognitive performance and increase the risk of suicide or hospital admission for mental illness.

At today's hearing, I look forward to discussing the city's heat emergency plan, steps we can take to improve response efforts and preparation the city can

2	make that reflect the reality of a warming planet.
3	At the center of this discussion must now be how we
4	protect the most vulnerable New Yorkers from the
5	direct and indirect effects of extreme heat. We know
6	that extreme temperatures are contributing to a
7	worsening outdoor air quality with prolonged heat
8	leaving more of our planet vulnerable to wildfires.
9	The smoke from the Canadian wildfire spread to New
10	York City multiple times over the summer, bringing
11	with it the negative health impacts of PM 2.5
12	including respiratory issues. The summers wildfire
13	smoke was a wakeup call and the city must continue to
14	invest in better preparations for the next wildfire
15	smoke emergency and ensure that the public is
16	educated and ready for what comes next. I'm looking
17	forward to hearing from the Administration and the
18	public today on how we can best protect the health of
19	all New Yorkers inside and outside.
20	I want to conclude by thanking the Committee
21	Staff for their work on this hearing, Committee

Counsels Chris Pepe and Sara Sucher, Policy Analyst

Anne Driscoll, Financial Analyst Danielle Glants, as

Mahnoor Butt, Data Scientist Julia Fredenburg and

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well as my team, Jonathan Boucher, Seth Urbinder, and Kevin McAleer.

I now want to turn it over to Majority Leader

Powers for a statement on his legislation being

considered today but before I do, I want to highlight

the importance of these bills. Intro.'s 1127 and

1130 would take critical steps to improve the air

quality in our public schools and city owned

buildings. We believe that Intro.'s 1128 and 1129

represent common sense, reasonable, smaller scale

initiatives our city can take to begin addressing

indoor air quality in commercial and residential

buildings.

I look forward to a productive discussion on this legislation today. I will now turn it over to Majority Leader Powers for his opening remarks.

MAJORITY LEADER POWERS: Thank you and thank you to Chair Schulman the Committee Staff for holding this hearing today and giving me an opportunity to talk about my package of four bills to monitor and improve indoor air quality here in New York City.

It's a topic I think is on the top of minds of New Yorkers between the pandemic and the wildfire smoke a few months ago that turned our skies red this summer.

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New Yorkers have learned all too well, the quality of the air we breathe both the outdoors and inside is of tremendous importance and of increasing concern. We spend nearly 90 percent of our lives indoors; a frightening number and research shows that indoor air quality can have a tremendous impact on our health.

The package introduced that we're hearing today will position New York City as a national leader in promoting safe, healthy air across educational, municipal, commercial and residential buildings.

Intro. 1127 will require the Department of
Education to update rules, setting standards for
indoor air quality in New York City public schools
and provide real time reporting and an online
dashboard to keep families informed on air quality in
school buildings. I believe Boston has a similar
model for that right now. You can go online and
check out the air quality.

Intro. 1130 will require the creation and updating of rules, setting standards for indoor quality in city owned buildings annually including the building I believe we're sitting in right now.

The city will be required to install real time air

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quality monitors in the common spaces, city buildings and post that data online.

Introductions 1128 and 1129 will require the Department of Health to set up a five-year pilot program to monitor indoor air quality in monitoring in the commercial residential buildings. Buildings in New York City, commercial residential can participate voluntarily in that but buildings that will begin to receive any financial assistance during the pilot timeframe and after the passage of legislation will be required to participate.

While this pilot program is designed to be smaller in scope and limited to five years. believe it's a strong start in the right direction. The data collected and best practices learned through this legislation will help the city understand the issue in front of us and create standards in enforcement in air quality. Engineers behind new buildings like 222 70 Park Avenue might know the importance of indoor air quality, that's why that building was designed with double the minimum ventilation rate, better filters, and a real time air quality monitoring system. As the greatest city in

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the world, why would we except anything less than the best for our homes, our schools and our workplaces?

Again, thank you to Chair Schulman for holding this hearing. I want to thank Borough President Mark Levine who played a very large role in helping to draft these bills and to move them forward whom I believe will be testifying here as well today and to my fellow bill sponsors, Committee Staff and other staff here who have spent months helping draft these bills and all the advocates for their support. We look forward to hearing testimony today and to moving this legislation forward. Thank you.

CHAIRPERSON SCHULMAN: Thank you Majority Leader.

I'll now turn it over to the Committee Counsel to

administer the oath to the Administration.

COMMITTEE COUNSEL: Thank you very much Chair.

Good afternoon everyone. Before I administer the
oath I just want to let everyone know that you have
up to 72 hours after the conclusion of this hearing
to submit written testimony if you would like to
submit written testimony.

If you would like to testify in person today, please ensure that you have filled out an appearance card. You can go to the Sergeant at Arms to fill out

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an appearance card so that your name is called when it is time for you to testify.

Okay, I will now turn it over here to the

Administration. Please raise your right hand and

please respond with I do after I administer the oath.

Do you swear to tell the truth, the whole truth and

to respond honestly to Council Member questions?

Thank you. You may proceed.

CORINNE SCHIFF: Good afternoon, Chair Shulman,
Majority Leader Powers, Council Member Menin. I am
Corinne Schiff, Deputy Commissioner for Environmental
Health at the New York City Department of Health and
Mental Hygiene, and I am here with Andrew Faciano,
Assistant Commissioner for Environmental Disease and
Injury Prevention at the Health Department; Heather
Roiter, Deputy Commissioner for Planning and
Resilience at New York City Emergency Management;
John Shea, Chief Executive Officer of the Department
of School Facilities at New York City Public Schools;
and Lana Kim, Deputy Commissioner at the Department
of Citywide Administrative Services.

On behalf of Commissioner Vasan, thank you for the opportunity to testify today on four bills addressing indoor air quality and a bill requiring an

2	annual report on drowning deaths. The Health
3	Department's charge is to protect and promote the
4	health of all New Yorkers. As relevant to this
5	hearing, we respond to thousands of 311 calls from
6	New Yorkers' each year about their indoor air
7	quality, including by conducting inspections and
8	taking enforcement action against property owners;
9	work with other agencies on indoor air quality
10	issues, including New York City Public Schools, the
11	Departments of Housing Preservation and Development
12	and Environmental Protection, and the School
13	Construction Authority; and provide outreach and
14	education on ways to improve indoor air. We also
15	issue data on causes of death, including by drowning.
16	We appreciate the Council's interest in these issues.
17	Regarding the indoor air quality bills being
18	discussed today, we would like to work with the
19	Council to ensure efforts to address indoor air
20	quality will result in meaningful outcomes. Two of
21	the bills, Introductions 1128 and 1129, require the
22	Department to conduct studies of indoor air quality
23	by taking air quality measurements at multiple
24	locations within every residential and commercial

building that receives city funding. The Department

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has not yet been able to determine how many buildings this is, but we anticipate this would be a very large and expensive undertaking that would not yield actionable information.

The bills require measurement of air quality components that are either already understood and have enforceable standards, so there is no need to study them or have no health-based standards and so we would gather information but not be able to use it to address indoor air quality concerns.

The other two air quality bills, Introductions

1127 and 1130, require the Health Department to set standards for indoor air quality in schools and other buildings owned or leased by the City of New York and requires the Health Department and New York City

Public Schools to install real time monitors in a variety of locations and issue multiple reports regarding the data collected. For some of the indoor air quality measures, there are already established standards and additional rulemaking is not needed; for others there are no health-based standards, and the Department has no basis on which to promulgate rules.

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2	For still others, the conditions warm or are
_	For still others, the conditions vary or are
3	controlled by the occupant of the space and are not
4	generalizable. And while promising, the consumer
5	grade air sensors that are currently available do not
6	meet the stringent requirements for air quality
7	instruments required for regulatory purposes. The
8	bills also mandate the Department and, for
9	Introduction 1127, New York City Public Schools to
10	conduct outreach and education on indoor air quality.
11	We agree that we can reevaluate potential outreach
12	efforts to maximize impact. We look forward to
13	working with Council to see what the most effective
14	potential outreach efforts are to maximize impact.
15	Regarding Introduction 1119, the Department

supports providing the public with data on drowning deaths in New York City and already issues information in our Annual Summary of Vital Statistics. We would like to discuss adding the additional information the Council seeks into this report, rather than creating a duplicative document. We appreciate the recognition in the bill of protecting personally identifying information. We would like to discuss the bill's mandate to report individualized data. Some of the factors we would be

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2 required to report raise privacy and confidentiality 3 concerns, but we can provide aggregate data.

Thank you for the opportunity to testify. We are happy to take your questions.

CHAIRPERSON SCHULMAN: Okay, so what I'm going to do actually is a little bit of a reversal. I'm going to talk about the legislation first and then go into other sort of selective questions.

So, on legislation 1119, which is what about the drowning. You answered the question about whether you support it. Does DOHMH collect aggregate — collect or aggregate any data currently on drownings in New York City? I think you sort of alluded to that.

CORINNE SCHIFF: We do. As I testified, we do include information on deaths by drowning in our annual summary of vital statistics.

CHAIRPERSON SCHULMAN: What does DOHMH see as potential obstacles to generating the report on drowning citywide? It's basically what you had testified to.

CORINNE SCHIFF: That's right, I mean we do report on this, so you know in general there are no obstacles. The Council and the bill is asking for

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some additional data that we are happy to include if it's included in the OCME in the Medical Examiner Report. Our concern really has to do with the individualized data that the bill asks for and that we do have a lot of concerns about. We'd like to talk about aggregating that.

CHAIRPERSON SCHULMAN: What measures does DOHMH currently take to prevent drowning deaths in New York City?

CORINNE SCHIFF: There are multiple programs across the city. Some sponsored or organized by the Health Department to promote swimming. It is a critically important effort and I know the Council has recently done some work, very important work on promoting learning to swim. So, we support efforts for children to learn to swim. It's important and we investigate drownings to try to determine why those happen if they happened in certain locations.

CHAIRPERSON SCHULMAN: Okay does DOHMH have recommendations on how DOHMH or other agencies could more effectively address drowning deaths in the city?

CORINNE SCHIFF: So, as I think the Council will see with the report or looking at the report of vital statistics, there are very few drownings that happen

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at regulated sites. New York City has an extremely strong safety program. That is something that the department oversees in our recreational water program. So, I'm happy to say that there are not a lot of drownings in places that where we would really consider that to be preventable.

CHAIRPERSON SCHULMAN: Okay, thank you. I'm now going to ask some questions about Intro. Number 1127. Is the Administration supportive of Intro. 1127, which would establish standards in reporting regarding indoor air quality in schools within the city school district?

uhm, and regarding really all of the bills, which have quite a lot of overlap. We don't think that we are really gaining actionable information with these bills. We certainly appreciate and agree with Council that indoor air quality is important to health and we do a lot of work on indoor air quality to make sure that New Yorkers know about the importance to health. But what we don't think is that we need — we don't need real time air monitors, which can't tell us information really that we can use. We don't need, as I testified, we don't need to

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study indoor air quality. The real time monitors can't give us information that we can use for regulatory purposes, as I've said.

So, we would really like to work with you to focus on the outreach and education components of the bills.

CHAIRPERSON SCHULMAN: Thank you. The City of Boston currently maintains a detailed online database with a public monitor indoor air quality in each of the city's public schools in real time. This is called the Indoor Air Quality Center Dashboard. sensor records current CO and Co2 levels, PM10, PM2.5 temperature and relative humidity. This data has allowed Boston Public Schools to make decisions about school closures during extreme heat or extreme cold events, increase fresh air during school events with high emissions, fix issues with mechanical ventilation systems and empower teachers to report air quality issues in their classrooms. Would creating a similar system in New York City be feasible?

CORINNE SCHIFF: So, we are aware of what they have done in Boston and again, it has not led us to

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2 move to create a similar system. I'll turn it to my 3 colleague from New York City Public Schools.

JOHN SHEA: Sure, thank you and thank you for the question Chair Schulman. First of all on behalf of the Chancellor, we really appreciate the opportunity to talk about these bills on these very important issues. He was fully supportive of the same values that we all share. I'm familiar with the Boston program. I've actually spoken to my colleagues in Boston about the program, how they put it in place. We share Department of Health's concerns about the way that the bills are currently worded with the types of devices.

We have a slightly different plan and if you allow me to tell you what we do in New York City Schools?

CHAIRPERSON SCHULMAN: Sure.

JOHN SHEA: First of all, every New York City school has a custodian engineer in their building and one of the things that they're required to do every morning is to walk through the building and ensure that the buildings ventilation is working. If they find any issues where it's not working, even in one particular space, they escalate those to the Deputy

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Director of Facilities for a priority repair. They also update an online tracker, which is available publicly. People can go in and see the status of ventilation in any of the classrooms, instructional spaces in New York City schools and every week, they sign an attestation survey that they are maintaining their ventilation systems.

They've also been given tools to measure air flow and the same parameters that the Boston system covers right now. Only they do it with portable indoor air quality monitors. I actually have one here that they use. And we feel that that's important to have a person who actually has the training and the skills to take that meter and not diagnose problems but try to figure out what the underlying issues are and address them. It's a more active system than a passive system where the sensors are giving you information, which may or may not be accurate. need to be calibrated. They may or may not be working. But with the person with a meter that's measuring the same things, that's already happening in our schools.

CHAIRPERSON SCHULMAN: Right, so with that, I actually want to ask, were you notified by the

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2	custodians when we had that big heat surge because I
3	got when it was like 96 or 98 degrees and I got
1	complaints from schools in my district that the air

complaints from schools in my district that the air conditioning wasn't working. That some of the classrooms were overheated. That some of the

7 students got sick, so I just want to ask about that.

JOHN SHEA: Sure, we had a number of concerns and complaints come in about air conditioning, which is a very specific issue with the temperature and we always work to address those as soon as possible and custodian engineers did report those things up to us. And the buildings that we were tracking over the course of that weekend, after the first day of school, everything that was reported to us was repaired by that following Monday, but certainly that was a difficult time with the heat that we had at the beginning of school.

CHAIRPERSON SCHULMAN: Okay, thank you. I'll — I'm going to circle with you offline about some of the schools in my district.

JOHN SHEA: Absolutely. Any specific schools if you have issues, we're happy to answer those.

CHAIRPERSON SCHULMAN: Thank you. Uhm, does let's see, what monitoring of indoor air quality

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exists in city buildings as of today? Are there
plans for expansion in the near future?

CORINNE SCHIFF: Indoor air quality is a broad umbrella term that covers really scores of components. So, I would say for example, uhm there's monitoring in residences of carbon monoxide.

Everyone should have a carbon monoxide detector.

But there is no broad surveillance system across city buildings and really that wouldn't be appropriate or necessary. Instead, we would like to let New Yorkers know about ways to improve their indoor air quality and keep it at high quality. So, the idea of a broad surveillance for scores and scores of parameters doesn't really make sense.

CHAIRPERSON SCHULMAN: Okay, thank you. I have other questions to ask but I want to turn it over to Majority Leader Powers to ask questions. Before I do that, I want to acknowledge we've been joined by Council Member Julie Menin.

MAJORITY LEADER POWERS: Thank you. I have a series of questions but I wanted to start with the first one. When you talk about the custodians every morning have to go and check out whether the

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essentially the HVAC systems are working? Is that what we're saying is their job every day?

JOHN SHEA: Yes, whatever the HVAC system is for their particular building, whether that's a central system or whether that's a hybrid system, yes.

MAJORITY LEADER POWERS: Okay, 2021 during the COVID crisis it was reported under ventilating to campus are more prone to code. This is in Gothamist. Prone to COVID cases and there was a finding that 4,800 classrooms and 615 buildings where the only way to circulate air is to open the windows.

So, that may be the system for the buildings that are currently have mechanical systems but it seems like many don't. And so, if the measure that we're discussing here is the custodians responsibility every day is to check on those systems and report upwards, I'm a parent or a teacher or a student in those school buildings. First, it feels like there's a lot more buildings that are not covered by that system where we're failing that. And second, is it seems to me essentially the model that we're relying on is believe us and believe that the custodian is doing that, is reporting it. Then and I did a very quick Google search to see if I could find the system

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that you mentioned. It was — I have not yet but I'll keep checking. So, it feels like that system is not one where if I was a parent checking to know what my school buildings air quality is like, where it would be a successful system, relative to one like Boston where I can find that in two seconds. Two seconds to Google that and find it and in that system, I can have a very clear reading. Do you want to respond to that?

JOHN SHEA: Sure, so the first thing is you are correct. We have a number of buildings that only have windows for their ventilation but custodian engineers in those buildings also know that that is the integral part of their ventilation system, so they make sure that the windows are operational. If there is a central exhaust fan that draws air through the building, that has to be working.

So, just because those buildings were built at a time when the code required that as the ventilation system, it doesn't mean that they don't check and make sure that that is working. And they still have to update their tracker and that information, I apologize that you haven't been able to find it online but that information is out there. I can

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share that with you and you can take a look at it. Which you are correct, there is a difference between seeing parameters like the Boston system has as opposed to the functionality of the ventilation system but we also feel very strongly that operating ventilation is the most important thing as opposed to if you look at the Boston dashboard. There are sensors that are out of calibration, there are sensors that are not working. So, the value of the data is only as good as what you are getting back. We feel that having a custodian engineer in the building with a device that can measure those same parameters and respond to concerns in the building and have conversations and then escalate issues that are beyond their ability is the best way to handle that.

MAJORITY LEADER POWERS: What data right now — so can you just tell us, what is the data that's being collected inside of the school building right now in terms of when it comes to air quality, the exact measure? Like, what measurements are you taking to measure for air quality?

JOHN SHEA: So, they will measure; when they walk into a space, they'll use the monitor to measure what

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it shows which is PM2.5, PM10, particulates Co2, temperature and relative humidity. They also have anemometers to measure air flow, so whatever the ventilation happens to be, they can check to see that air is actually flowing to give them a status of the operation of the ventilation system.

MAJORITY LEADER POWERS: Okay. Uhm, moving to

Department of Health, there was a quote that was said

in the last response of questions that we don't need

to study air quality was the sentence. That is — and

I don't want to take it out of context. I wanted to

give you an opportunity to explain that but is that

position of Department of Health that we don't need

to study air quality?

CORINNE SCHIFF: We're really speaking to what's outlined in the bill, which is to place thousands probably of real time air quality monitors to tell us about parameters that we already — either we already understand or where the health standards are being developed or are unknown. And so, we can't take the action that the bills would require us to take by developing regulations or developing recommendations for regulations.

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2	MAJORITY LEADER POWERS: Okay, so what is when
3	you say $-$ so I want to talk about the actionable side
4	about that in a second but before that, when you talk
5	about data we already understand, can you explain
6	that including what are you collecting? Like in this
7	building here that we're sitting in today, municipal
8	building, what data is Department of Health
9	collecting today about the air quality in this
10	building for instance that would say you understand
11	or are already collecting?
12	Well, let me ask this, what are you collecting
13	today right in this building right here today?

CORINNE SCHIFF: So, as I noted in response to the Chair, we are not collecting, there is no program to broadly collect data on indoor air quality.

MAJORITY LEADER POWERS: Correct, that's why
we're here today and but you're also taking the
position that we shouldn't and that even if we have
the data, there would be no action to take. I
disagree with that. I think if we had so — in
buildings particularly where we don't have a
mechanical ventilation system, which seems to be
many. During the COVID crisis when it was well
documented that there were ventilation issues all

throughout our city school buildings and I could read
you the articles about them and they were all 2020,
2021 documenting for the first time, parents and
teachers and leaders in the city, taking a look at
air quality and ventilation because of the concern
around an airborne pandemic. There was a lot of
discussion suddenly about and I think a lot of
reports about the inadequate buildings and
infrastructure here in the city especially school
buildings and I'm not putting this on anybody, we
have a lot of old buildings that need massive
upgrades. We also have a capital budget for school
capital budget. We as Council Members have capital
improvements we can make to our schools where they
make sense where they're possible. So, I don't
necessarily think they're not actionable but I guess
I'd go back to my question here today. Like, we're
sitting at a building, is there any data collected
here today on a daily basis or weekly basis about the
air quality inside this building?
CORINNE SCHIFF: So, we don't mean to downplay

25 It's important to health. Where we are concerned

the importance of indoor air quality. We agree with

the Council that indoor air quality is important.

about the bills is the directive to place real time air quality monitors, which is these are emerging technology and not going to give us information that is something that we can take steps to improve indoor air quality. So, that's really where I think that we differ.

So, the bills direct us to place real time air quality monitors which will provide you know reams of decontextualized information, and then to take those to promulgate regulations for indoor air quality standards. We don't need the real time air monitors to promulgate rules because they either already exist or we won't be able to use those mounds of data to develop new rules.

What we do know is a lot about how to improve indoor air quality and we agree with you, that there's more that can be done to make sure that New Yorkers know about ways to improve indoor air quality. To know that the Health Department is here to take 311 calls and respond to concerns about indoor air quality. There's many, many steps that New Yorkers can take on their own and we want New Yorkers to know about that.

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MAJORITY LEADER POWERS: Okay but the answer is no right? You're not collecting data inside the building here that we're sitting in, as an example?

CORINNE SCHIFF: We are not and nor could we use the real time air monitor data that the Council is suggesting to take the steps that you are also suggesting that we take.

MAJORITY LEADER POWERS: Okay, what do you measure right now if any and how many buildings across the city?

CORINNE SCHIFF: We do not have a broad citywide indoor air quality surveillance program. And that would not -

MAJORITY LEADER POWERS: What about specifically? Because I said broad, specific?

CORINNE SCHIFF: when we respond to a — there are different things that we do and I'll start and then I'll turn it over to my colleague who runs our Indoor Air Quality Enforcement Program.

So, uhm for example, we will get a call from a

New Yorker about concerns about indoor air quality,
we will send an inspector and will do assessment of
the specific conditions in that apartment and where

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appropriate we can take enforcement action against a property owner to correct the condition.

We have a program implementing really groundbreaking legislation out of the Council, to conduct enforcement for children and adults who have severe persistent asthma. Whose asthma is exacerbated by indoor air quality conditions, specifically around pests or mold. So we do a lot of outreach to make sure that New Yorkers and their doctors know about this program. We take referrals and we will go and do enforcement actions there.

So, that's just a sample. Again, this is a very broad umbrella term indoor air quality, so we have lots of different programs and they are tailored to the different concerns. Let me just see if my colleague has anything to add. Okay.

MAJORITY LEADER POWERS: Okay but you talk about a specific program that's a complaint driven apartment for residential apartments if I got it correct. What about municipal buildings? What about schools? What about common areas inside of buildings?

CORINNE SCHIFF: Sure, so we have multiple programs. One of those is a complaint driven

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2 response program that I just described. We'll take

3 complaints from New Yorkers. We will respond to

4 those including by conducting inspections. With

5 respect to municipal buildings, perhaps DCAS wants to

6 take that question.

LANA KIM: Yes, thank you. So, in our buildings, we do have tenants who may have concerns about air quality. They will go to COSH Citywide Occupational Safety and Health and they will — COSH will go in and do the measurements and give us a report back and then if there's any actionable items we will execute those accordingly.

MAJORITY LEADER POWERS: Okay, so it's a mostly complaint driven process in the city right now.

There's no monitoring. There's no proactive measurements to check on building air quality, is that fair to say?

CORINNE SCHIFF: So, it varies. Again, it's, you know this is a broad umbrella term. I do want to just finish your earlier question; we also respond to complaints regarding commercial spaces and I think Mr. Shea has spoken about the work that he does at New York City public schools on air quality. So, there is a complaint driven program and I mentioned

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concerns.

our uhm our program to implement the Council's law
regarding pest conditions and asthma. That is a
referral driven program by providers. We also have a
program where we are doing work around construction
dust, which can also create indoor air quality
hazards. So, we have a wide variety of programs. We
approach the issue in many different ways and it's

MAJORITY LEADER POWERS: For residential programs, can you tell us how many complaints you received in the last calendar year?

very much tailored to the different kinds of

CORINNE SCHIFF: We'll have to get back to you with actual numbers it's thousands but we'll get back to you with the exact number for the last couple years.

MAJORITY LEADER POWERS: So, we're asking the city to take a measure beyond the complaint driven process. We believe it's important, necessary and I think COVID made a lot of you know held in New York to make a lot of observations about their breathing and the ventilation systems that are in place. We have hundreds of thousands of people, millions walking into city owned buildings every single day.

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They're people like us, all of us. They are teachers students, parents and much more than that. And so, hearing your comments on the legislation, there's not a desire to collect data. I understand the concern about cost; I'm always happy to work with folks on cost and how to make sure the program is successful and efficient when it comes to cost. There is not a desire to collect data, to understand data or to then take an extra action beyond that. To run a pilot program, to do a voluntary program, which we're proposing.

So, I guess my question is, putting aside all my other questions here because they're all related to the belief that you would want to do something, not complaint driven but putting aside all my other questions, I guess my question is, if you do desire as you state to share our goals, what is the plan for moving forward? I guess my only question at this point and time because I hear a concern about the collecting data. I hear concerns about the equipment being used. I hear concerns about the mandate and that we have a disagreement about what properties are covered under the residential commercial piece of it, which we're happy to clarify.

2 So, we can go through all the concerns. 3 happy to walk through those and I'm always willing to 4 be collaborative and that's the way I try to approach legislation but I guess my question is, so put aside 5 the piece of legislation. We're sitting here in the 6 7 year 2023. This Administration has five more years 8 or six more, whatever I have two. I don't know but what is the plan moving forward? Because I don't want to - you know we can go through all issues but 10 11 I'm not hearing a plan that meets what I think New 12 Yorkers are asking for at this particular moment. have noticeable need in our side of our school 13 14 buildings. We talked about the buildings that aren't

So, I'm going to throw this back to you guys.

Don't tell me that you share our goals. Share us a plan and I want to know what the plan is moving forward.

CORINNE SCHIFF: So, I do just want to first comment on the characterization. It's not that we don't want to collect data. You know the Health Department loves data. The real time monitors that would be mandated under these bills, those are

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emerging technology. They're not certified by EPA.There are no standards that they measure against.

So, when we want to collect data, we want to collect data for a reason, for a purpose and what we are trying to express is that the program under the bills to place monitors that are not yet certified tools, won't give us data that we can use. That's what we're trying to say. It's not about a desire to collect data, it is that the data that the Council would be directing us to collect here is not something we would be able to use to produce the

outcomes that the Council intends.

So, as for a plan, we do agree that there is more that we can do. That New Yorkers can learn more and we've not done enough to help New Yorkers understand about the importance of indoor air quality. You quoted how much time we all spend indoors and it's a very, very important setting for health. And so, we do think that we can do more and we would like to talk with you. You are working with your constituents. You hear from them. We'd like to talk with you about what more the need to know. Some of that outreach that we do as I described is affirmative. We are reaching out to healthcare

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providers to have them refer patients to us who could benefit from our enforcement action, if they have indoor air quality issues that might be triggering asthma. But some of the work that we do is more passive and so maybe there is more that we can do. We would love to work with you to help develop that idea.

JOHN SHEA: May I also add a few things specific to schools Council Member because you brought up a few things that I didn't get a chance to respond to. So, first of all I want to be clear on the record that the health and safety of our students and staff is our highest priority. The air in all of our schools is safe. The School Construction Authority, as mentioned in the beginning of the pandemic, did a tremendous amount of work to check the status of our ventilation systems and identified repairs that needed to be made and those repairs were made and the system we have in place now is to make sure that those things still are maintained and operating.

We also, one thing I didn't mention have provided two air purifiers at least for every constructional space within New York City schools as an additional level of protection. So, all of those things are

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2 actively working to ensure quality air in all of our
3 schools.

The other thing is that we share your concern about the buildings that have older systems, only windows for ventilation. And the School Construction Authority is not here but they have made a significant commitment to electrify a number of their buildings and a number of our buildings and one of the things we're working with them on is identifying and focusing on those buildings that have limited ventilation because ventilation is a component of that electrification process.

So, there is a plan for schools to be able to not only continue to maintain but also upgrade the buildings where it's appropriate.

CHAIRPERSON SCHULMAN: Okay, thank you. I just want to acknowledge we've been joined by Council Member's Feliz and Narcisse. So, my question is, what monitors is Boston using?

JOHN SHEA: So, I will have to get back to you on the specific brand. I know I've seen it; I just don't recall off the top of my head.

CHAIRPERSON SCHULMAN: The follow-up to that is, are they delivering data that doesn't meet regulatory

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standards based on what you guys have testified to today?

JOHN SHEA: Yeah, as far as whether they meet regulatory standards or not, I would have to get back to you.

MAJORITY LEADER POWERS: Well, I guess my follow up - sorry, my follow up question is are you saying the Boston Program doesn't work and is inefficient because they don't have the right technology? As you're criticizing the potential that we may not either?

JOHN SHEA: Uh, no sir what I'm saying is that the Boston Program is one thing we feel that we have a system that is just as good if not better and in alignment with the CPC guidance, which is always saying that you should be spending your resources on maintaining and upgrading your ventilation systems as opposed to providing passive solutions that don't actually improve air quality?

CHAIRPERSON SCHULMAN: Okay, uhm, so I have - so, I have some other questions that I want to ask and then I'm going to hand it over to my colleagues and come back. How many heat emergency days were there

HEATHER ROITER: Hello, uhm, there was seven emergency days in 2023.

CHAIRPERSON SCHULMAN: Is there a forecast in number of heat emergency days for '24 and '25?

HEATHER ROITER: There — so we consult with the National Weather Service. There's not an exact number that's provided that far out in forecasting but we work with them closely and there's a seasonal forecast that comes out and then we work to learn that and then share that information with our agency partners.

CHAIRPERSON SCHULMAN: How often is the Heat Vulnerable Index updated?

CORINNE SCHIFF: The Health Department creates the Heat Vulnerability Index. We just updated it in June. It relies on factors that don't change all that often, having to do with the neighborhood so we update it periodically.

CHAIRPERSON SCHULMAN: How has the Heat

Vulnerability Index helped the city prioritize

resources to communities at higher risk of adverse
health impacts due to extreme heat?

HEATHER ROITER: Hi, so the Vulnerability Index has been really valuable to Emergency Management.

We've been able to use that to inform our cooling	
centers. We, as we work with partners, we look at	
that and look at the distribution of cooling cente	rs.
So, when limited, making sure that we prioritize o	n
days that the cooling centers can be in those heat	
vulnerability areas, as well as during emergencies	
and activations, making sure that we're taking tha	.t
into account and it's part of our situational	
awareness	

CHAIRPERSON SCHULMAN: What neighborhoods have been identified as having high HBI? If you don't have it now, you can send it to us but we'd like to have that.

CORINNE SCHIFF: We'll send that to you. We don't have that off hand.

CHAIRPERSON SCHULMAN: Okay, so what agency is ultimately in charge of activating the heat emergency plan?

HEATHER ROITER: New York City Emergency

Management is the one that activates the plan and
then works with agency partners on executing the
strategies.

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CHAIRPERSON SCHULMAN: Can you walk through the steps NYCEM takes once the heat emergency plan is activated?

Sure, so once we hit the HEATHER ROITER: threshold, we'll notify our partners that we've activated the plan and then strategies will include interagency coordination. So, we'll have a call with our partner agencies and then different strategies in the plan are enacted. One major one would be opening cooling centers. A large one is also communication. That might be communication to our vulnerable populations through the Advanced Warning System. Also pushing that out through our community groups, Strengthening Communities program, press releases, Notify NYC, and then we'll also look at depending on the thresholds, with what can be done with beaches and pools and talking to the Parks Department and then we're also monitoring also the electrical grid and working with our utility partners.

CHAIRPERSON SCHULMAN: When you're making notifications, in how many languages is that?

HEATHER ROITER: Notifications, the Notify NYC program is in 14 languages including ASL.

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CHAIRPERSON SCHULMAN: Does NYCEM activate the cooling center finder and the National Weather Service issues a heat advisory?

HEATHER ROITER: We activate the cooling center finder. We turn it on when the heat — the day of the heat. So, we try to put as much notice as possible but we have to work with our cooling center partners to make sure we know what the days and hours of operation will be and how they align with the heat emergency the day of the heat.

CHAIRPERSON SCHULMAN: But then how does that align with the National Weather Service when they issue a heat advisory?

HEATHER ROITER: So, the weather service will issue the heat advisory and so we make sure that the cooling centers are open the day of the heat advisory and that's also in the cooling center finder. We'll show those —

CHAIRPERSON SCHULMAN: So, it's automatically activated when the Heat Emergency Plan is activated?

HEATHER ROITER: Right, so it's not automatic.

It's uhm the heat plan turns on and it sets off a series of actions, right? And so, the series of actions will be communication, talking to our

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partners and then we start to work with our partners
for turning on the cooling centers. But the cooling
centers are open the day of the heat emergency but we
will activate our plan before the day of the heat.

CHAIRPERSON SCHULMAN: As a quick follow up to the air quality hearing that was held over the summer, when do you anticipate being able to share the after-action report on wildfire smoke?

HEATHER ROITER: Right, so we are aware of the Council's request and we'll be following up on that request as well.

CHAIRPERSON SCHULMAN: Have you started drafting emergency protocols? Because that was mentioned during the hearing.

HEATHER ROITER: Yeah, so we've been uhm took
that very seriously after uhm for the air quality
event and we've been working on expediting our plans
and working on them, taking emergency planning
efforts and working on that.

CHAIRPERSON SCHULMAN: You want to give me a goal of or you don't want to say it here?

HEATHER ROITER: I prefer not to commit to that at this time. Thank you.

CHAIRPERSON SCHULMAN: By the end of the year?

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It is an accelerated effort. We work very closely our planning efforts take quite some time and this one, I promise has been accelerated far above and beyond all of our other planning efforts.

CHAIRPERSON SCHULMAN: Thank you. Uhm, I'm going

HEATHER ROITER: We're working, it's accelerated.

to — I have a bunch of other questions but I'm going to ask my colleagues who want to ask questions. So, I know Council Member Menin had asked first. Oh she left, okay Council Member Narcisse.

COUNCIL MEMBER NARCISSE: Good afternoon and thank you for being here. Thank you Chair Schulman for doing the hearing because that's how we find out. We educate ourselves and see how the best we can make New York City a better place that we all can live together. Is there a specific benchmark for acceptable indoors school air quality? Is there a benchmark? You don't have one?

CORINNE SCHIFF: Indoor air quality is a very broad umbrella term, so there are benchmarks as you call them for certain parameters and not for others.

COUNCIL MEMBER NARCISSE: Hmm, how often the air quality measurement taken and are they done

# COMMITTEE ON HEALTH

2	throughout	the	school	year	including	during	major
<b>પ</b>	temperatur	sh-	fts?				

JOHN SHEA: So, as described custodian engineers in every building have the tools and respond to concerns and complaints whether those are ventilation related or temperature related and we always work with principals and school communities to address whatever the specific issue is because as we spoken about, that could be a wide variety of different things that concern a school.

COUNCIL MEMBER NARCISSE: So, assuming that each school works independently, the custodians and the principal, everybody maintain on maintaining the temperature shifts in their building?

JOHN SHEA: Sure, sure. If we're talking about temperatures, every instructional space in New York City school now has air conditioning. We spent over \$400 million over the past couple years to ensure that all of our classrooms had air conditioning and —

COUNCIL MEMBER NARCISSE: And the air quality measurement.

23 JOHN SHEA: And the -

COUNCIL MEMBER NARCISSE: Air quality

25 measurement.

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JOHN SHEA: Oh, well, we did invest as part of our COVID re-occupancy plan in making sure that the custodian engineers have those air quality measuring tools, yes we did.

COUNCIL MEMBER NARCISSE: Okay. Are there penalties that probably somebody else can — currently in place for city buildings for consistently failed to meet the required indoor air quality standards?

CORINNE SCHIFF: So, the Health Department does have an enforcement program. We take thousands of calls from New Yorkers every year and we respond to those including by conducting inspections and ordering a property owner to make repairs or address the condition. If it doesn't meet the standard and if the property owner fails to do that there can be financial penalties, yes.

COUNCIL MEMBER NARCISSE: So, the answer is yes.

Uhm, what populations are the most vulnerable to
adverse health impacts from periods of extreme heat?

How can we best support vulnerable individuals in our
city? What guidance does DOHMH offer to help New

Yorkers deal with extreme heat?

CORINNE SCHIFF: So, extreme heat is most dangerous of all of our extreme weather events and it

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is one of the big concerns at the Health Department.

People who are more vulnerable to extreme heat are people who have underlying medical conditions, the elderly, pregnant people. We do a lot of work to make sure that the vulnerable populations know their risk. The most important thing is for people to have home cooling. We know that people without air

conditioning are at greatest risk.

We do a lot to promote New York States HEAP program. We were very disappointed when again, this year, this is a New York State program. They were again unable to meet the demand for air conditioning that they provide to vulnerable New Yorkers. And so one suggestion for example is we would love to work with you to make sure that your constituents know to get their applications in early, so that they're sure to be able to benefit from that program.

COUNCIL MEMBER NARCISSE: By any chance, do you have data on the seniors and people that are most at risk in our city?

CORINNE SCHIFF: We do. You know what I'd love to do is to send you annually, we issue a Heat Mortality Report. In there we provide a lot of detail about heat. This is obviously a growing area

of concern for New York City as our climate changes.

I will send you a link to that report. It has a lot
of very, very important data.

COUNCIL MEMBER NARCISSE: How does extreme heat strain our healthcare system?

Work with our healthcare network and hospital system during our emergency, our heat emergency activations. It can put extra demand for anyone whose vulnerable and has extra strain. It can have additional emergency department emissions and so, we do work with our partners in real time to monitor and then there's also the Health Department has surveillance as well. Information that we can monitor and learn from during the event.

COUNCIL MEMBER NARCISSE: Okay, what public health strategies are DOHMH employing to help New Yorkers deal with the worsening impacts of extreme heat and climate change?

CORINNE SCHIFF: So, you know of course this is the issue of our time is the health impacts from climate change and we have many programs across the city to address climate change and all of the impacts that it will have on New Yorkers. With respect to

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heat and the Health Department's work, we do a lot of
surveillance and policy analysis, so that we can
support the Council and our other agencies including
NYCEM on steps to take to protect New Yorkers. We do
a lot of work to do outreach including about for the
HEAP programs so New Yorkers can have an opportunity
to get air conditioning. Again, that is the most -
our biggest concern is people who live without air
conditioning and I lost my train of thought. So, let
me think and get back to you.

There's just a lot of work that we do relating to heat and climate change and we would be happy to talk with you about that.

COUNCIL MEMBER NARCISSE: How does this work look like when it come to NYCHA houses and seniors like really high-risk neighborhoods?

CORINNE SCHIFF: I remember the other thing I wanted to say. One of the big areas of work that we are interested in is building community resilience.

We know that community-based organizations are trusted messengers and they are the ones who can really build community and for people to support each other. You will always hear us say during emergencies, not just the Health Department, NYCEM as

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well. This is the time to check on your neighbor to make sure if you have air conditioning but you know your neighborhood doesn't, your family member doesn't, time to invite them over to share that air conditioning with you.

So, that's a big part of our work is making sure that community-based organizations also have those messages and can work with their residents and they are the trusted messengers. And that can include NYCHA developments. We do work with NYCHA. We provide technical assistance to them and also get that message out to NYCHA residents.

COUNCIL MEMBER NARCISSE: Thank you and I'm assuming the outreach does in different languages because language access is very important to us in the Council.

CORINNE SCHIFF: Yes, the Health Department has a strong language access program to meet not only the citywide mandates for language access but to go beyond that where it's appropriate depending on the community.

COUNCIL MEMBER NARCISSE: Okay, how do warmer temperatures in the fall and winter impact our overall health?

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CORINNE SCHIFF: I think this is emerging for all of us. Our summers are extending and so, the kinds of extreme heat events that my NYCEM colleague has described are ones that we may very well see earlier and later in the season, and so it's something that we are watching in the city and planning for.

COUNCIL MEMBER NARCISSE: The last question I have for you. Are New Yorkers more prone to infectious diseases and insect borne diseases if the fall and the winter seasons become increasingly warmer?

CORINNE SCHIFF: Something that we are watching at the Health Department. We also have you know programs to do surveillance for vectors of disease that are bugs and animals. I think we may very well see animals that might have in our earlier climate have died over the winter, surviving over the winter. We may see new species arriving in New York City because we have a different climate that is hospitable to them. So, I think there is really an enormous and varied changes that we are looking out for and planning for and it's a very, very important question.

Τ	COMMITTEE ON HEALTH 56
2	COUNCIL MEMBER NARCISSE: Yeah and I was
3	wondering about the spring when we are having around
4	the city, how you decide because I live by waters.
5	Like uhm, you know my whole district is by water from
6	Canarsie to all the way to Ships at Bay. And a lot
7	of time I will see the schedule. I was wondering
8	because some schedule will be like around Mill Basin
9	but I don't see much going on in that area and I'm
10	close to borderline of East New York, which is by
11	[00:58:20], so I'm not seeing those zip codes
12	sometimes, so I'm wondering.
13	CORINNE SCHIFF: Alright, are you talking about
14	mosquito spraying?
15	COUNCIL MEMBER NARCISSE: Uh, huh.
16	CORINNE SCHIFF: Okay.
17	COUNCIL MEMBER NARCISSE: Do you know about them?
18	Can you answer some?
19	CORINNE SCHIFF: I can take a stab at it. So,
20	our vector control work, our mosquito control work is

So, l work is all designed to reduce the risk of West Nile Virus. It is a very, very data driven program that relies on integrated pest management, so we in the Spring, we are watching the mosquitos over wintering to see what the season is likely to be like for mosquitos and

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then we are taking action in the spring to kill the
larva to reduce the population and then we have traps
throughout the city. We collect mosquitos, we test
them to see whether they $-$ whether the mosquitos are
carrying West Nile Virus and as those rates of
infectivity rise, that's when we act to spray. Our
primary effort is to encourage New Yorkers to get rid
of standing water. That is where mosquitos breed, so
when we do those spray events, we have a lot of
outreach to New Yorkers so they know what's coming
and we define those boundaries very, very carefully
entirely based on the data.

COUNCIL MEMBER NARCISSE: Thank you so much and thank you for your gracious time. Chair, thank you.

CHAIRPERSON SCHULMAN: You're welcome. So, I have a question. Climate is changing. You know a heat wave is defined right now as its three 90-degree weather days. Am I correct?

HEATHER ROITER: It's two days in a row of 95-degree heat index or one day of 100.

CHAIRPERSON SCHULMAN: Okay. Okay, so given the fact I mean we didn't have a lot of — we had one declared heat wave this summer but we had a lot of days where the temperature was just below that but it

was consistent for days and days and days on end.

So, is there is any thought given to given what's happening with the climate and it's changing and everything else to maybe change how we define that for our cooling centers and other programs?

HEATHER ROITER: Sure, so our plan — we do look at it annually but we do consult with the Health Department and National Weather Service to always look at our threshold for the definition but for each year and we can always as things look and change in the future, you know we'll always be evaluating our triggers but for cooling centers, just as a reminder, there are senior centers and there are libraries. So, they are open even when they're not activated as a cooling center, they are open to the public and have air conditioning.

CHAIRPERSON SCHULMAN: And I wanted to ask a follow-up on the heat. Was it that the state didn't provide enough funds or?

CORINNE SCHIFF: They're not sufficiently resourced to meet the demands so we would love for New York City residents to get in there as soon as the program opens.

# COMMITTEE ON HEALTH

2	CHAIRPERSON SCHULMAN: So, because one of the
3	things we can do is go is go to our state reps and
4	figure that piece out.

CORINNE SCHIFF: We'd love to talk to you about that.

CHAIRPERSON SCHULMAN: Please because uhm we have to put together the Speakers agenda for — at some point as we get towards the end of the year, so — CORINNE SCHIFF: We will follow up for sure. Thank you.

CHAIRPERSON SCHULMAN: Please, that would be great. Uhm, so I want to ask about Be A Buddy program. With resources and — what resources and services does this program provide to the community?

CORINNE SCHIFF: Be a Buddy Program is that program, one of our programs to build community resilience and it is to fund community-based organizations to help them develop networks among their community members as they see fit as appropriate for their community. I will say that the program right now is on pause as we are looking at a new, so it's not active right now.

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CHAIRPERSON SCHULMAN: Okay. Uhm, is that because of budget cuts or is that just, you're just to be assessing it or?

CORINNE SCHIFF: Uhm, there was some delays in funding so it creates an opportunity for us to take a look at the program.

CHAIRPERSON SCHULMAN: Okay uhm, we'd love to have a conversation with you about how we can be helpful there. Uh, let's see. Uhm, I think that's, that's all the questions for me. I want to thank you for spending all the time with us and answering. you want to ask anymore? Okay, thank you very much and again, you know we want to work collaboratively with the Administration in terms of I think we all have the same goals and it's just the question of how we get there. And with emerging technology and everything else, you know I really appreciate all the jobs that you guys do. So, uhm, we'll circle back with you at some other point but thank you.

CORINNE SCHIFF: Thank you Chair.

COMMITTEE COUNSEL: Thanks very much to representatives from the Administration. Chair.

CHAIRPERSON SCHULMAN: Uh, I would like to now ask — we have Borough President Mark Levine on virtually and would like to ask him to give remarks.

Madam Chair. It's great to see all of you. Sorry I can't be there in person. I want to start by acknowledging how grateful I am to the leadership of New York City's Health Department, really the greatest big city Health Department in the world and I know they're leading now at a time of tight resources and significant challenges. So, everything I'm proposing today, I do understanding of what they're managing and I want to thank you Chair Schulman for your outstanding leadership with this Committee. I'm really proud to see what you're doing and grateful that you brought this issue to the floor today.

You know after every pandemic in New York City's history, we have reconsidered how we manage indoor air. And it's changed the architecture of this city in really profound ways that still impact us today. In recent decades, we retreated from some of those practices and we increasingly created for medically sealed buildings which I'm not sure what the logic of

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that ever was but we certainly learned during COVID, excuse me, that there's a real price to pay. Now is the time to look again at our buildings coming out of this pandemic. As we think about what comes next. The inevitable next wave or next pandemic in this city and there's no doubt that we have not given adequate consideration to indoor air quality in the city, in our schools, in our residences, in our offices and I'm really pleased that we're putting forth the package of bills today that would allow us to take a step forward in that direction. That would get us the data that we currently lack, so that we can begin to formulate the policies, the standards that would allow New York City to begin to prepare for the next spread of airborne disease.

We currently do not have adequate data on Co2 levels, on air change rates, on particulate matter in New York City buildings. That really hindered us during the pandemic and getting that data is the first step towards beginning to set standards and ultimately to put in place remediation.

Without that data, we can't track our progress.

We can't hold ourselves accountable and I believe

that we can't do adequate science to understand the

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impact on public health. The bills we're putting
forward today address this in every type of building
in the city, public and private, housing, office,
educational and while there is a cost associated with
it that I'm sensitive to, this is an investment that
we need to make now in order to prepare for the
standards and remediation that we're going to need to
prepare for the next pandemic.

So, thank you Madam Chair for leading on this and thanks to everyone for your due consideration on this legislation. Thank you so much.

CHAIRPERSON SCHULMAN: Thank you Borough President Levine.

COMMITTEE COUNSEL: Thank you very much and at this time, we want to hear from Lacey Tauber from the Brooklyn Borough Presidents Office. If you could please come. And you may begin when ready.

LACEY TAUBER: Thank you so much. Good afternoon
Chair and thank you for holding this hearing today.

My name is Lacey Tauber, I'm the Legislative Director
for Brooklyn Borough President Antonio Reynoso.

While the extreme heat and air quality
emergencies our city experienced this summer impacted
everyone, the fact is that low-income New Yorkers of

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color disproportionately experience the impacts of climate change on a daily basis. So, rather than focusing on responding to emergencies, we should be focusing on how we can protect these vulnerable populations long term, which will in turn make us more prepared when emergencies happen.

So, our office is in the final stages of developing the Comprehensive Plan for Brooklyn.

You're getting a little preview of a part of it today. It has a focus on the intersection of planning, housing and public health. There's a few maps attached that I can see you're looking at, which is great. Showing some of our existing conditions research about air quality and heat impacts in the borough.

So, you can see if you look at those maps that the outdoor air quality is worse on average surrounding highway corridors, such as the BQE, which runs through neighborhoods of color such as Sunset Park and Williamsburg's Southside. And the maps also indicate a correlation between asthma rates and indoor air quality issue as well as associated conditions such as mold and asbestos. These asthma rates and concentration of these complaints are

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2 highest in neighborhoods of color in North, Central

3 and Brooklyn, neighborhoods such as Brownsville,

4 Flatbush, East New York and Bushwick. And heat

5 vulnerability tells a similar story. Per DOHMH's

6 metric, which we discussed, there are also - these

7 are also the communities that are most at risk of

planning for a more equitable borough.

dying during and immediately following extreme heat.

So, the repetition of these patterns is no coincidence; rather, it's a symptom of decades of bad planning and disinvestment from our communities of color and our public housing. The comprehensive plan for Brooklyn makes recommendations for how we can begin to right these wrongs through proactive

Some of those recommendations around air quality and heat include: Creating a new Million Trees program to improve the tree canopy targeted to areas of higher pollution and heat vulnerability.

Supporting the package of indoor air quality bills that are being heard today from sorry, Council Member Powers. I wrote Bottcher, that's not right. That's my error, I will fix it.

COUNCIL MEMBER BOTTCHER: I'm flattered. Thank you for that.

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BOROUGH PRESIDENT LEVINE: Thank you for the testimony. I want to just be on the record that I am

LACEY TAUBER: Apologies Council Member and Borough President Levine whom we commend for a creative approach to a difficult issue. Uhm, advocating for capital repairs and more efficient responses to tenant complaints in public housing. Expanding access to cooling centers with a lower threshold for opening. Requiring new development to implement cooling systems such as air conditioning or more sustainable methods like air source heat pumps, passive house design, and cool or green roofs.

Require developers to include window shares or blinds in new construction and requiring NYCHA and all private landlords in high heat vulnerability areas to install window shades or blinds for tenants who request them.

The last bullet is about interagency coordination both state and city. And these are just some examples of our recommendations, which we look forward to sharing the full report with you very soon. So, thank you for the opportunity to testify today.

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not nearly as smart, talented, or good looking as

Eric Bottcher but one day I will hope to get there.

COMMITTEE COUNSEL: Thank you so much. At this time, we are going to be moving onto public testimony. As a reminder, if you would like to submit written testimony for the record for this hearing, you may do so up to 72 hours after the conclusion of this hearing.

If you wish to testify in person, please fill out an appearance card to ensure that your name is called. Typically, how we will do this, is we will hear from folks in the room first. We will then move to virtual testimony on Zoom.

At this time, I'm going to call our in-person panel. That will be Nina Prescott, Kate Krause, Cara Johnson, Alexander Riccio and Alan Watts.

CHAIRPERSON SCHULMAN: I just want to remind everyone that there's two minutes to give. So, everyone, I just want to remind you, we have a lot of people both virtually and here who want to testify today, so in order to give time to everyone, we really want to try to limit people to two minutes. You could submit your testimony. It will be put in the file and it will be written up if you don't get

## COMMITTEE ON HEALTH

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2 to it. So, I just wanted to remind folks of that.
3 Thank you.

COMMITTEE COUNSEL: Nina Prescott, we can start with you and then we will just go down the table please. Thank you.

NINA PRESCOTT: Thank you so much and good afternoon Chairperson Schulman, Council Member Powers, and members of the Committee on Health. My name is Nina Prescott. I am a Health and Air Quality Associate at RMI, founded as Rocky Mountain Institute, a non-partisan, non-profit organization that works to transform global energy systems. I'm speaking on behalf of RMI today to deliver our comments on the proposed bills Intro.'s 1127, 1128, 1129 and 1130 that offer valuable advancements towards healthier air quality in New York City buildings.

We submitted written comments as well that are more comprehensive and I will summarize how these bills can be improved, along with three points for why these bills are beneficial to New Yorkers.

First, in addition to the current pollutants listed in the bills, we recommend including nitrogen oxides, a group of toxic gases including nitrogen

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dioxide and nitric oxide. Nitrogen oxides play a key role informing additional health harming pollutants like ozone and fine particulate matter and nitrogen dioxide exposure is succeeded with a range of negative health impacts. Including these pollutants in the proposed bills will further support the health and wellbeing of New Yorkers.

Second, while few indoor air protective policies exist in the U.S., these bills show leadership for New York City to establish a first of its kind indoor air quality standard for key pollutants that should serve as a model for other cities.

Third, the proposed bills address critical indoor air quality concerns including infectious disease spread, wildfire smoke, emissions from fossil fuel combusting equipment and appliances and the unequal burden of indoor air pollution exposure in low income and disadvantaged communities.

Fourth and finally, indoor air pollution is a health threat in all buildings that necessitates the proposed bills. The pilot programs will collect necessary data reflecting New Yorks diverse building stock and will provide New Yorkers with direct access to information for their health and safety. The

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standards for indoor air quality in schools and city buildings will benefit student and worker health performance and absentee's and rates.

In closing, we're deeply encouraged by the proposal to address indoor air quality in New York City and believe that doing so will support prosperous, equitable, clean and healthy communities. We have significant technical knowledge on this topic and are happy to provide expertise if needed beyond our written comment. Thank you for the opportunity.

COMMITTEE COUNSEL: Thank you. Can you please turn your microphone on?

ALEXANDER RICCIO: If I could get the five seconds back? Today is a sentimental moment in history of pandemics in New York City. I sit here before you, the son of a man who once came to the city as an urban fellow and rose to become a City Commissioner while making the city his home. The city is now my home, our home and what affects each of us, affects all of us. It's easy for each of us to forget this as we wake up in the morning but the world has a way of reminding us.

I sit here before you to support these bills, not just as another step towards ending this pandemic,

the pandemic we've shared but ending all future airborne pandemics for generations to come.

Two and a half years ago, I realized what you realized today. That we need to systematically collect data on the indoor air that we share and I've spent most of the past three years running a project to do exactly that. I watched the Governor and the Mayor declare the indoor air safe, knowing that they made little or no effort to check. And seeing with my own eyes the many ways that it never made a change. I also knew that officials testifying, some before you today, would declare sporadic measurements to be not representative conditions across the city and while themselves, discouraging efforts to collect systematic data from across the city.

The data that volunteers have already collected from me already makes the case for action. In addition to the measures proposed here today, the Committee must take decisive action to expedite improvements so we might benefit before the coming winter waves of COVID. We must also enact guarantees that the rules permitted to protect the air we share, meet the minimum targets for stringency.

2	I heard today from the First Speaker, a City
3	Official, that there was indeed concern that they
4	would know what actions the Council expects them to
5	take given the language of the bill. This is a good
6	opportunity to correct that. Set prescriptive
7	standards that they cannot ignore. I also heard
8	complaints about the usefulness of Co2 metering.
9	This is a position that is in clear contradiction.
10	The consensus among aerosol scientists not to mention
11	the contradiction of the current advice of the CDC
12	and other major public health organizations. We know
13	the ladder because we fought tooth and nail for it.
14	I finished earlier. I'm supporting these bills
15	and I want further action.
16	COMMITTEE COUNSEL: And I'm sorry, could you just
17	state your name for the record.
18	ALEXANDER RICCIO: Sure, Alexander Riccio.
19	COMMITTEE COUNSEL: Thank you.
20	ALAN WATTS: Good afternoon everybody. I
21	appreciate the opportunity to be in front of you. My
22	name is Alan Watts. I'm Director with CerroZone,
23	this a Berkshire Hathaway Company and we're an
2.4	Indoor Nir Ouglity management gemnany and what we do

is we engineer and we manufacture technology to make

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indoor spaces safer and healthier. However, I am not here to pitch a product or a technology. We're here to offer our support in these very important pieces of legislation.

I am also here to share in this once in a generation opportunity to change the trajectory and the safety and health of the infrastructure of New York. As a lifelong New Yorker, I've seen the effects of the New York City infrastructure deteriorate over time. As a senior executive professional in the Pathogen Control Space, I understand the unique problems that our city faces due to the age and the lack of investment in ventilation systems.

So, the COVID-19 Pandemic has taught us a lot of things and opened our eyes and here's three important facts here: Humans are the source of airborne disease and contamination. Number two, being in close proximity at others certainly increases the risk, the exposure to these harmful airborne pathogens. And number three, our buildings certainly lack the proper ventilation and technology to protect us from the risks of airborne pathogens and VOCs. We certainly can't live in bubbles. Although, there's a

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lot of times we'd like to live in a bubble especially in this city.

Although this proposed legislation, through the proposed legislation, we may find the opportunity to So from my perspective, there are three non-negotiable pillars, okay. Science and Technology, validated proof and government oversight. There are two specific pieces that are quite important here. Sensor Technology, okay making the invisible, visible. Understanding that reporting air quality is fundamental and it is part of our jobs.

CHAIRPERSON SCHULMAN: Summarize.

ALAN WATTS: To summarize, we are here to offer our support in any way we can to help the city kind of become the city of the future in terms of clean air.

CHAIRPERSON SCHULMAN: Thank you.

ALAN WATTS: Thank you.

COMMITTEE COUNSEL: Please.

CARA JOHNSON: Good afternoon Chairperson

Schulman, Keith Powers Majority Leader and the

members of the Council. Thank you so much for the

opportunity to be here today. My name is Cara

Johnson and I am Counsel to Carrier Corporation. Our

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founder invented modern air conditioning in 1902 and we are now a leader, a global leader in healthy sustainable and resilient climate and energy solutions.

We are here today to show our enthusiastic support for these bills which will drive adoption and solutions to improve air quality at the pace that's needed and we'll serve as a model for how to do it elsewhere, as New York City so often does. Our feedback falls into three buckets around feasibility and implementation, technical points and rules development. And we've provided that in writing, uhm for your review as well. But today, I want to go off script for a moment and respond to some of the dialogue that we had earlier.

So, the University of Chicago's Energy Policy
Institute identified air pollution as the top global
threat to public health but a point that gets lost is
that the majority of our exposure to outdoor air
pollution actually happens inside. So, when you
think about the wildfires from this summer and the
advice to go inside, without air quality monitoring
in place, you don't actually know whether the air
quality inside is better than the air quality

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indoor air quality.

2	outside. So, I will echo my colleague next me who
3	said that you need to make the invisible visible.
1	Real time monitoring is about that public awareness.
5	Without it, the complaints driven system that's in
ó	place today is not going to reach the public. It's
7	not going to drive that adoption and improvements in

I'm also a parent, so I echo what you said earlier about trust but verify and we just want to show our strong support again for these bills. Thank you so much.

CHAIRPERSON SCHULMAN: So, I have some questions for the panel. So, Cara what science supported standards recommendations exist for improving IAQ?

CARA JOHNSON: So, there are a number and I like to go straight to the experts when it comes to standards. There is the Well Building Institute.

There is ASHRAE 241 which is the American Society if Heating and Refrigeration and Air Conditioning

Engineers. There is the Lancet COVID Commission on safe schools and safe work right. And a lot of times we think of these indoor air quality issue in silos.

So, COVID, wildfires, when you're improving air quality of one health attribute, you're improving it

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for all heath attributes, right? So, the Lancet
recommendations are foundational. It's about having
a tune up for your building, so commissioning your
HVAC system. It's about having that ventilation but
it needs to be filtered ventilation. It's not just
opening a window. And then it's high-grade
ventilation, so you're central ventilation needs to
be the MERV 13 or higher. Your in-room air
purification needs to be HEPA or higher for it to be
effective and these recommendations align with the
White House Clean Air and Buildings challenge as
well.

So, there are a number of science supported standards out there that exist and they are health based today.

CHAIRPERSON SCHULMAN: And what stakeholders should be involved in rules and guidance creation?

CARA JOHNSON: So, in our view it's really best to involve all of the relevant players. That's how you're going to get accuracy. That's how you're going to get feasibility. That's how you're going to get the buy in that you need. So, it's everyone from the environmental and the public health experts, industry experts within the HVAC industry. You have

school officials, building owners, facility managers and then the communities using those buildings are key right? Again, this aligns to the White House Clean Air in Buildings Challenge and that engagement factor is so important.

CHAIRPERSON SCHULMAN: And does anyone have a response to the Administrations testimony that the science isn't there yet. That the equipment is not available that can actually do the measurements?

ALEXANDER RICCIO: What are they waiting for? CHAIRPERSON SCHULMAN: It's not proven.

ALEXANDER RICCIO: And how much proof do they need? The science can be textbooks thick at this point. The scientists have been screaming from the rooftops. The aerosol scientists I work from, hundreds of them have gotten together in letters WHO CDC and it's entire; I'm not kidding, this is an entire field of science, aerosol science.

CHAIRPERSON SCHULMAN: Yeah, I know. I'm talking about the, not in terms of the equality. In terms of the measure, the equipment that's being used to measure indoor air quality they said doesn't meet certain standards. That's what I was asking about.

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ALEXANDER RICCIO: Co2 metering has been around since the 1800's. There are times I mean, people in schools that actually; I can't remember if it was Chicago or Baltimore, in the late 1800's, they were going in the classrooms with very primitive devices and measuring Co2. In 1915, 1918 pandemic, they did the same for influenza in Chicago. I mean, these devices are not new. They've been used commercially and industrially for a very long time. What they need to know is that there are different types of devices that are more accurate than others and can set standards, say requiring NDIR sensors instead of DVOC sensors, you will get better data.

As part of running my project, I've collected a lot of data on this sort of thing and experiment with volunteers and I've seen that there are some devices that are good and all you got to do is use those.

It's not like this great unsolved problem.

CHAIRPERSON SCHULMAN: Okay, thank you very much all for your testimony. Appreciate it.

COMMITTEE COUNSEL: Thank you very much to this panel. Uhm, I just want to call again Kate Krause if you are in the room. Not seeing Kate. Okay and just one last time, if you are in the room and you wish to

Τ	COMMITTEE ON HEALTH 80
2	testify in person, please fill out an appearance card
3	so that you can speak in person. Not seeing any,
4	okay. So, that means that we will now move to
5	virtual testimony and I'm going to call our first
6	remote panel. It will be uhm, and I apologize for
7	any mispronunciations of names in advance. Paula
8	Olsiewski, Joseph Fox, Janet Handle, William
9	McQuade(SP?). We will start with Paula. You have to
10	wait for the Sergeant at Arms to call time before you
11	begin your testimony. And as a reminder, everyone
12	will have two minutes for their testimony.
13	Paula, we will start with you.
14	SERGEANT AT ARMS: Starting time.
15	PAULA OLSIEWSKI: Chairperson Schulman and
16	distinguished members of this Committee. I am
17	honored to testify today to express my strong support
18	for all four indoor air bills before this Committee.
19	I'm a contributing scholar at the Johns Hopkins
20	Center for Health Security where I direct our work on
21	indoor air quality policy.
22	Today, I'm testifying in my personal capacity as
23	a long-time resident of New York City. So, the

25 necessarily reflet the views of Johns Hopkins.

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opinions expressed here and are my own and do not

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Indoor air quality is important because people spend 90 percent of their time indoors. That's where we breath almost a swimming pool full of air every day. But unlike outdoor air or drinking water, indoor air quality is not regulated. Elevated levels of some airborne pollutants are associated with many health problems, including pregnancy loss, cancer, dementia, cardio vascular disease, asthma, COPD, and more. Airborne infectious diseases such as flu and COVID also float in the air on the tiny bits of breath.

When you enter a building, you have no idea if the air quality is good. Today's bills would make indoor air quality visible by testing the air and reporting the findings in public buildings, city schools and in certain residential and commercial buildings. What's missing from these bills is a plan for what to do when the indoor air quality alarm goes off.

If a fire alarm goes off, we all know who to call and what to do. At the Center for Health Security, we've crafted a model clean indoor act that describes what to do when that IAO alarm goes off.

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2		SERGEANT	AT	ARMS:	Т	hank	you	so	much.	•	Your	time
3	has	expired.										

CHAIRPERSON SCHULMAN: Finish, finish, go ahead finish, go ahead.

PAULA OLSIEWSKI: Thank you. Thank you for your time. That was the end. We're happy to help.

CHAIRPERSON SCHULMAN: So, I have a question. I know you're not here officially for Johns Hopkins but what do you think that — I mean is there a program that they're working on? Is there anything that maybe would help us in terms of scientific discovery or anything else around this issue?

PAULA OLSIEWSKI: You have many practicing scientists or at least several who are going to testify later today. The different things that I quoted in terms of what diseases and so on, there is well established scientific and medical evidence about the harm of these different pollutants. And as I said, when the indoor air quality alarm goes off, we need to know what to do. And so, our center has crafted a model state Clean Indoor Air Act that actually the State of Massachusetts has already introduced as a bill but this includes the very important points that these bills, that is testing

1	COMMITTEE ON HEALTH 83
2	the air and making the reports public in real time
3	but also then, what to do you know if there is a
4	problem, who should be responsible and so on. And I
5	plan to provide written testimony with more detail
6	and ${ t I'}{ t m}$ happy to answer more questions.
7	CHAIRPERSON SCHULMAN: Appreciate that. I don't
8	know if you were here when the Administration
9	testified but the New York City -
10	PAULA OLSIEWSKI: I was.
11	CHAIRPERSON SCHULMAN: New York City Emergency
12	Management. We had a hearing back in August around
13	the air quality and New York City Emergency
14	Management said they're working on an emergency plan
15	for this. So, uhm, hopefully that will be done soon
16	but inline with what you were talking about.
17	PAULA OLSIEWSKI: That sounds great. Thank you.
18	CHAIRPERSON SCHULMAN: Thank you very much.
19	COMMITTEE COUNSEL: Thank you so much. We're
20	going to be moving on to Joseph Fox. Please wait for

going to be moving on to Joseph Fox. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

JOSEPH FOX: Thank you very much. My name is

Joseph Fox. I am a professional engineer who works

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on ventilation systems in schools and I Chair the Indoor Air Quality Advisory group Ontario Society Professional Engineers.

I'd like to speak about why monitoring the air and having a system with accountability is so important. In the past year. I have seen engineers design ventilation systems to only provide 70 percent of bare minimum outdoor air flow rates from the current standard ASHRAE 62.1. Their excuse was that apartment was not required, so they didn't have to adhere to any standard.

I see mechanical contractors replace ventilation equipment with new equipment that has no ability to supply outdoor air, so they could purchase a less expensive piece of equipment. I've seen school ventilation systems programed to shut off the ventilation when space temperatures are satisfied. I've seen dentists, doctors' offices and childcare centers refuse to run their ventilation systems and claim the landlord asked them not to. I've seen schools with air units working properly but there's an air distribution problem with the duct work and some classrooms do not get any ventilation. The current indoor air quality system is broken. It's

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primarily reliant on the honor system from building
owners and facility operators and they have a
financial incentive to provide poor indoor air

quality and it hurts society as a whole.

A complaint-based system is also deficient. The cut off for what people might feel is poor indoor air quality is much lower than what is actually required to provide protection from airborne diseases or other adverse health effects. The system needs to change. It requires monitoring the air and requiring remediation to ensure people are provided with safe and healthy indoor air environments, just like we ensure people are provided with clean water.

While there might not be a system in place right now, it can and should be created to create a safer environment for all. Thank you.

COMMITTEE COUNSEL: Thank you very much. We'll be moving onto Janet Handle. Please wait for the Sergeant at Arms to call time before you begin your testimony.

22 SERGEANT AT ARMS: Starting time.

JANET HANDLE: Thank you Chairman Schulman,

Manhattan Borough President Mark Levine, Council

Member Powers and other Council Members. Thank you

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for the opportunity to speak to you today. My name is Janet Handle and I am President of the Waterside Tenants Association. We represent the 4,000 people living there but I'm also President and Co-Founder of TRAIPAG. That stands for Transplant Recipients and Immunocompromised Patient Advocacy Group. TRAIPAG speaks for the more than seven million immunocompromised in the U.S..

Since COVID began, we have lived very constrained lives, no indoor activities without a mask. No movies, no concerts, no indoor dining, no family events. Vulnerable populations are depending on you, the Mayor and the city agencies to keep us safe. We are speaking in support of this package of indoor air quality bills being considered today. Improving ventilation and monitoring Co2 levels will make indoor spaces for everyone. In particular, publicly posted Co2 monitors would enable the immunocompromised the opportunity to assess the risk before they go into a particular indoor space to participate in some activity.

We encourage you to do the following in addition to passing these bills: Set standards, measure and collect data and remediate as needed. Require indoor

said and then submit the rest of it in writing.

air quality monitors to be publicly posted so citizens can see them when they walk into a building. Raise public awareness on air quality, indoor and out, PM2.5 and Co2 as a proxy for respiratory pathogens so that people understand when they walk into a building and they see an air quality monitor what that means for them.

Further, people need to understand why they should wear masks when recommended during an air quality alert and why they should wear high quality masks not just surgical masks. Additionally, disseminate information on how to make do it yourself air purification devices such as the Corsi Rosenthal boxes. Consider making these kits available in areas with higher risk of negative health impacts and without cost.

And then modify building codes to require multifamily buildings to have robust filtration on indoor air tanks and one switch shutdown of —

SERGEANT AT ARMS: Thank you so much. Your time has expired.

CHAIRPERSON SCHULMAN: You can summarize what you

air intakes.

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JANET HANDLE: Yeah, my last point was just you know when we had this problem with the wildfires you know all of these buildings are taking that area.

Like we have 50 indoor air tanks in our buildings.

They need to be on a one switch shutdown. That's all I'm saying. The building codes need to be modified.

So for a building there's a one switch shutdown for

CHAIRPERSON SCHULMAN: Okay, thank you.

COMMITTEE COUNSEL: Thank you very much. We'll now hear from William McQuade. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

WILLIAM MCQUADE: Good afternoon Chairman

Schulman and members of the Health Committee. My

name is Bill McQuade, I am the ASHRAE Society

Treasurer and have been in the HVAC industry for 30

years and a licensed professional engineer for over

25. I'm pleased to submit these comments on behalf

of ASHRAE regarding the proposed indoor air quality

bills.

ASHRAE founded in New York City in 1894 is a global technical society advancing human wellbeing

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through sustainable technology in a build environment. The society and its more than 53,000 members including over 2,300 in New York State focuses on building systems, energy efficiency,

indoor air quality, refrigeration and sustainability.

This testimony is regarding the proposed legislation establishing standards and reporting requirements for indoor air quality in the city buildings and school buildings as well as pilot programs to monitor indoor air quality in certain commercial and residential buildings. suggests that these ambitious bills would be further strengthened by referencing ASHRAE Standard 62.1, 62.2, which are both ventilation and acceptable indoor air quality for commercial and residential buildings and ASHRAE's new standard 241 control of infectious aerosols. We recommend that bills 1127 regarding the school buildings and 1130 regarding city buildings incorporate ASHRAE Standard 62.1 ventilation and acceptable indoor air quality and the requirements for indoor air quality standards.

IEQ can significantly effect student learning and development and the COVID-19 pandemic has increased awareness of the impacts of IEQ and student health.

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Adhering to the appropriate standards and guidelines is essential to managing indoor air quality.

Standard 62.1 specifies minimum ventilation rates and other measures intended to provide indoor air quality as acceptable to human occupants and minimizes adverse health effects due to poor indoor air quality.

SERGEANT AT ARMS: Thank you. Your time has expired.

CHAIRPERSON SCHULMAN: You can summarize the rest of what you said and also submit it to us in written testimony.

WILLIAM MCQUADE: It has been submitted.

Basically 62.1 handles schools and commercial buildings. 62.2 is residential buildings. I think both of those should be referenced. And then our new Standard 241 is really based on the knowledge that we gained during the COVID pandemic about controlling infectious aerosols and the components of that standard can also be used when you have air quality issues like wild fires and things like that to protect the building occupants in those states.

So, ASHRAE's staff is happy to provide a briefing on Standard 241 upon request including Dr. William

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Boncleth(SP?) our Chair of the Committee to help develop the standard. Thank you.

CHAIRPERSON SCHULMAN: Thank you very much.

COMMITTEE COUNSEL: Thank you very much to this remote panel. We will now be moving to our second remote panel. We'll be hearing from Richard Bruns, Jaron Burke, Dr. Serene Al-Momen, Ello Ryan, Matthew Cortland, and Sarah Evans. We'll hear from Richard Bruns first. You'll each have two minutes. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

RICHARD BRUNS: Distinguished members of this

Committee, thank you for holding this hearing. I'm

Richard Bruns, Economist of the Johns Hopkins Center

for Health Security and one of the authors of the

ASHRAE 241 Standard. The opinions expressed herein

are my own and do not necessarily reflect the views

of Johns Hopkins University or ASHRAE.

I specialize in cost benefit analysis of public health policy, and I'd like to make three main points. First, labeling saves lives, even if the labeling process is imprecise. Second, PM 2.5 is the

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most important thing to label. Third, the benefits of labeling PM 2.5 are much higher than the costs.

Imagine a world where there were no restaurant inspections and no restaurant safety scores. 110 years ago, New York lived in that world and thousands of people died each year from food borne disease and poison. The first step to saving those lives was letting people know what was going into their stomach. We should do something similar so that people know what's going into their lungs and their children's lungs.

The most harmful kind of air pollution is smog.

Technically fine particulate matter for PM 2.5.

That's the most important thing to label in control.

We know that any kind of regulation can get expensive and it would be wrong to require new action if we couldn't show that the benefits were higher than the costs. However, we have many good studies showing that the benefits of reducing smog exposure are much higher than the costs, like ten times higher.

If you enact these four pieces of proposed legislation, then in the future, there will be less death and lower medical costs. These proposals will reduce childhood asthma and it's pain and medical

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costs. They will reduce heart attacks, strokes and
COPD. Individuals and governments will save money on
healthcare compared to a world where you don't
control what's going into peoples lungs.

Thank you again for the chance to testify today and I encourage your questions on the costs and benefits of indoor air quality regulation.

CHAIRPERSON SCHULMAN: And I want to thank you for testifying and also helping to be a resource for us in our hearing today.

RICHARD BRUNS: Glad to help.

COMMITTEE COUNSEL: We'll now be hearing from Jaron Burke. You'll have two minutes. Please wait for the Sergeant at Arms to call time before you begin.

SERGEANT AT ARMS: Starting time.

JARON BURKE: Thank you Chair Schulman and Majority Leader Powers. My name is Jaron Burke and I'm the Environmental Health Manager at WE ACT for Environmental Justice. I have a master and public health degree with a focus on environmental health policy and air pollution and I appreciate the opportunity to testify to this Committee on a matter important to WE ACT and myself.

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We've already heard about the health impact of indoor air quality. These harms are not distributed equitably across race, income, and gender. Even before the COVID-19 pandemic, Black Americans were three times more likely to die of asthma than White Americans. Harlem, Washington Heights and the Bronx also have significantly higher levels of asthma than other neighborhoods in New York City.

Because of these health disparities, monitoring indoor air quality is necessary to identify sources of pollution and reduce exposure whenever possible.

We have to force the passage of Intro. 1130 and 1127 with specific amendments, first you require all reporting to include an explanation of city or school building to ensure that there's transparency and that all buildings that are eligible participate in the monitoring.

Second, to require remediation and improve indoor air quality if necessary after gathering indoor air quality data. The data is only useful if changes are made and are required to be made. In regards to 1128 and 1129, we have the concern that they offer limited benefit unless amended, we ask that there's an interest in monitoring indoor air, specifically in

## COMMITTEE ON HEALTH

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residential buildings as demonstrated by our pilot project last year to measure the indoor air quality impact of gas stoves.

Currently 1129 would only require monitoring for common spaces and would not measure pollutants where New Yorkers are exposed the most inside their homes. We would be happy to see 1129 pass if amended to include monitoring in homes within residential buildings and/or to include monitoring for nitrogen oxide specifically in buildings with combustion-based boilers. We are encouraged by the proposal to regulate indoor air quality in New York City, protect human health and I'm grateful for the opportunity to speak and provide feedback and I'll be submitting written comments as well. Thank you.

COMMITTEE COUNSEL: Thank you very much. We'll now be hearing from Dr. Serene Al-Momen. You'll have two minutes. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

DR. SORENE AL-MOMEN: Good afternoon and thank
you to Chairperson Schulman and members of the New
York City Council Health Committee for the
opportunity to testify here today. I'm Dr. Serene

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Al-Momen, the CEO of Attune, and I'm here today to express our support for the inclusion of indoor air quality monitoring for schools, Introduction Number 1127 legislative proposal by Council Member Powers.

As the CEO of a company that makes indoor air quality monitoring systems for all manners of buildings, there is more to this support than our business model. There is a clear need to monitor indoor air quality from the perspective of students and educator health, academic performance and facility efficiency. We learned this first from the COVID-19 pandemic and most recently with the poor indoor air quality resulting from the Canadian wildfires. Attune is a national leader in indoor air quality monitoring in schools. We have deployed over 15,000 sensors in over 1,000 schools nationwide. This includes the Montgomery County Schools, the largest school district in Maryland. In fact, we just disclosed 10,000 indoor air quality sensors, which is [01:44:30] public schools.

We are also in the Denver, Colorado school district, and presently we're working Atlanta, Georgia school district and schools in Las Vegas, Nevada among others. We have also worked with the

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educative body in Illinois and California. Here is what we have learned today. First, we need to make sure we are measuring the right particulate matter and the right size. We recommended the inclusion of measuring particulate pollution size of 1.0 micron and below. This is among the most difficult particulate size to filter out. It is also the particle size responsible for carrying COVID and other viruses. Having a sensor measure particulate of this size will help improve student and educator safety, and the current legislation does not include this size.

SERGEANT AT ARMS: Thank you so much. Your time has expired.

CHAIRPERSON SCHULMAN: You can wrap up if you want to give a summary.

DR. SERENE AL-MOMEN: Yeah, just uhm the second one was related adding a minimum standard for the effectiveness of the sensors that are included in school. We heard some concerns about emerging technology and how effective they are. We are advocating to include minimum standards in the bill that require the sensors or the flow to be tested in testified labs and show that testing so that you know

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the data th	at is provi	ded is	trustw	orthy a	and can	help
with decision	on making.	So, We	e will	submit	writter	า
testimony a	s well.					

COMMITTEE COUNSEL: Please.

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DR. SERENE AL-MOMEN: But thank you so much for letting me testify.

CHAIRPERSON SCHULMAN: Thank you very much.

COMMITTEE COUNSEL: Thank you very much. We'll be moving to Ello Ryan. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

ELLO RYAN: Hi, my name is Ello Ryan, I'm a parent of two kids and I'm here to testify in support of Intro. 1127. Thank you for bringing this bill.

Right now there's an invisible threat in our city schools and it's in the air. The ongoing COVID-19 pandemic and the wildfire smoke that hit earlier this year have exposed the problem but it's always been there and it's time to sit up and pay attention.

Speaking of paying attention, we tell our kids to do it. We tell them, go to school, pay attention, learn, behave. Then we put them in a closed room with 20 other people and zero ventilation. In rooms like this, carbon dioxide levels build and levels of

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Co2 are over 1400 ppm. The human brain actually suffers a 50 percent cognitive decline. It's declining cognitive ability. Studies have shown any classroom without central air and without window air vent is probably reaching these levels on a daily basis.

I have monitors for my home and I disagree with the Department of Health comments today that the data is not useful. I use this data. I'm pleased to use it to take steps to improve our homes' air quality. Open window, close a window, turn up a filter. Schools don't have these tools. They have no idea how safe or more likely unsafe the air within the walls is.

I have two young children with developing lungs and brains. We had a year in public school and then we decided to home school. We never planned to home school. We're doing it because the air inside of most schools is just plain unsafe. Parents let me know this because we've been measuring it with our own emerging technology, also known as credible counters and Co2 monitoring.

I'll also say that the principal and staff in our school had very little knowledge about the importance

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SERGEANT AT ARMS: Starting time.

of ventilation in classrooms and nor did they feel like they had to mandate to do anything about it.

It became clear to us that attendance was more important to our DOE than kids health. So, if I knew that the air at my kids school was clean and healthy, I would absolutely send my kids to school. Give us this data. Pass Intro. 1127 so we can see for ourselves what the air quality is like in our schools. Give us this data. Set good air quality standards, educate our school community so we can advocate for our kids, so we can protect them. better, make this clean air, safe, clean air mandatory in our schools. Give the schools the funding and the tools they need to make their air safe for all our children and teachers. Monitoring is a really good first step but we desperately need remediation, working central air in every school.

SERGEANT AT ARMS: Thank you so much.

CHAIRPERSON SCHULMAN: Thank you.

COMMITTEE COUNSEL: Thank you so much. We'll be moving on to Matthew Cortland. Please wait for the Sergeant at Arms to call time before you begin your testimony.

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2	MATTHEW CORTLAND: Chair Schulman, Council
3	Members and staff, thank you for holding this
4	important hearing. I am Matthew Cortland. I'm
5	appearing in my personal capacity but way of
6	conflict-of-interest disclosure. I'm a Senior Fellow
7	at Data for Progress, where my work is funded by the
8	Ford Foundations U.S. Disability Rights Program. I'm
9	also an attorney, I'm in an admitted practice in the
10	common wealth of Massachusetts. My graduated
11	Education in Public Health is from Boston University

and finally, I am myself immunocompromised.

Earlier, the Administration said that relative to indoor quality in schools "we have a system that's just as good if not better than Boston." I'm here to tell you that no, New York City absolutely does not have a system that's better than Boston but it could. From an internet connected device anywhere in the world, I can pull up real time data about the air quality in any given Boston public school. I cannot over emphasize how important that is to children with a variety of disabilities, children who are immunocompromised because of cancer treatment or rheumatoid arthritis, etc., etc..

2	The Administration seems to place great emphasis
3	on this being a "passive approach." That might be
4	true if there wasn't a BPS indoor air quality
5	monitoring and response action plan but there is.
6	I'm sure New York City could develop something
7	similar. The Administration seems to think that
8	device calibration is the major barrier. They're
9	calibrated annually. The devices are internet
10	connected. If something appears off, it's easy to
11	tell. Finally, I wanted to tell you that clean air
12	is broadly popular with voters. In September of
13	2022, a poll of 947 likely New York voters, a poll
14	not conducted in anticipation of this suite of bills
15	but uphold that comment 67 percent of New Yorkers
16	support "changing the building code to require
17	businesses to install air quality monitors, to detect
18	and prevent outbreaks that could lead to pandemics.
19	67 percent of New Yorkers support that.
20	CHAIRPERSON SCHULMAN: Do you want to sum up or
21	go ahead.

MATTHEW CORTLAND: I would just close by saying this is incredibly important to disabled New Yorkers and I know that New York City can lead the way here

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and this suite of bills is a fantastic foundation for that work to begin with.

CHAIRPERSON SCHULMAN: Mr. Cortland, I have a question for you. Uhm, are you aware of any legislation that's been proposed in Massachusetts around air quality?

MATTHEW CORTLAND: The Johns Hopkins folks that you were talking to earlier have a model state act that is being looked on very favorably in the common wealth. Boston Public Schools sort of built out their program without, there wasn't a need for legislation action at the state level to allow them to proceed. There was some ordinances in other communities in Massachusetts where the former CDC director and the former COVID-19 response coordinator live. Ashish Jha did a whole suite of school-based things that required some local ordinances but it's really that model state act.

CHAIRPERSON SCHULMAN: Okay, we're going to contact them and get a copy of that. Thank you so much.

MATTHEW CORTLAND: Thank you.

COMMITTEE COUNSEL: Thank you very much. We'll be moving on to Sarah Evans. You'll have two minutes

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for your testimony and please wait for the Sergeant at Arms to call time before you begin.

SERGEANT AT ARMS: Starting time.

SARAH EVANS: Good afternoon. I'm an Assistant Professor of Environmental Medicine in public health that the Children's Environmental Health Center at Mount Sinai. I'm speaking on behalf of our team of pediatricians, occupational and environmental medicine, physicians, nurses and scientists in support of the proposed bills 1127, 1128, 1129 and 1130.

As recognized experts in children's environmental health, we receive frequent inquiries from patients and families impacted by poor indoor air quality.

Our environmental asthma clinic sees and treats children with environmentally triggered asthma. A task that often involves identifying and remediating sources of indoor air pollution in the home.

The establishment of indoor air standards and monitoring programs will help inform targeted improvements to building conditions and empower New York City communities with data about the environments in which they live, learn and work.

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At Mount Sinai, we see the impact of poor indoor air quality on the most vulnerable children, pregnant women and low-income and communities of color. Our center is situated in East Harlem, where a higher percentage of residents report maintenance problems, carbon monoxide incidents and other housing issues that impact air quality compared to predominantly White neighborhoods.

Recent studies also find that children of color are more likely to be exposed to air pollutants at school than White students. Such inequities contribute to the higher rates of asthma and school absenteeism observed in Black and Latinx children in New York City and elsewhere. Healthy indoor air is especially important in school buildings yet poor indoor air quality in school buildings is a pervasive problem. A national survey administered by the GAO found that 41 percent of public-school districts had over half of their school in need of renovation to their HVAC systems.

Lack of ventilation in school buildings

contribute to greater exposure to indoor air

pollutants, mold growth and increased spread of

airborne pathogens. The proposed standards for IEQ

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in schools outlined in 1127 will improve the child
health and wellbeing. A study of 100 U.S. schools
found measurable progress in math and reading scores
when indoor air quality was improved, highlighting a
direct association between student academic
achievement and classroom ventilation rate.

In addition, the schools took steps to improve ventilation, had a 39 percent lower COVID-19 incidents during the height of the pandemic.

SERGEANT AT ARMS: Time is expired. Thank you.

SARAH EVANS: Okay thank you. I just would like to say that New York City really has the opportunity to pave the way for cities across the United States, particularly for the most vulnerable and we have submitted more in-depth written comments. Thank you.

CHAIRPERSON SCHULMAN: Thank you very much.

COMMITTEE COUNSEL: Thank you very much to this remote panel. We will now be moving to our third remote panel. We will be hearing from Paul Hennessy, Dean Rose, Alia Soomro, Hickma Abdul Goni and Alena Neganova(SP?). Paul Hennessy, we'll be hearing from your first. You'll have two minutes. Please wait for the Sergeant at Arms to call time before you begin your testimony.

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2 SERGEANT AT ARMS: Starting time.

PAUL HENNESSY: Hi, I'm Paul Hennessy. I work in New York and I am a member of the public calling in just to encourage better indoor air quality. support all four bills for this. New York must be a leading example in indoor air quality. Ventilation, HEPA filters, Upper Room UV Lights, air scrubbers, frequent air changes, and more will reduce pollution, needless CO2, and limit the spread of all airborne illnesses. Better indoor air quality also increases alertness, which in term helps students in school, and staff at the workplace. We also need improved air quality and air quality monitors in every public space so the public is aware of this quality. is a matter of disability access as well. Disabled and high-risk individuals deserve a right to clean air.

This investment will go to help business as well.

My personally, I would go out of my way to support a

business with the indoor air quality and I reject the

notion that we shouldn't implement data and

collection based on emerging technology. That's a

made-up excuse to kick the can down the road when

urgent action is needed now.

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In fact, Belgium mandated indoor air quality
measures and are out here for it. Businesses and
public spaces need mandates otherwise they're going
to cut corners. I find it disturbing that the DOH
staff say that there is a need to track indoor air
quality to humans in a pandemic. As well as the
Department of Education staff saying school
ventilation is in place. Schools in New York are now
well ventilated.

Furthermore in San Francisco actually, BART trains have installed denser MERV-14 filters and increased air changes to every 70 seconds. It's time New York does the same and modernize HVAC systems on public transit, schools, commercial, residential, and public buildings. I shouldn't have to put my health at risk because I have to go to a public space. The benefits of cleaner new air are tremendous and it's going to make New York a healthier place. Humanity all with irradicated [01:56:55] with clean water, so it's irradicated air borne illnesses with clean air. Thank you.

COMMITTEE COUNSEL: Thank you very much. We'll now be hearing from Dean Rose. Please wait for the

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Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

DEAN ROSE: Yes, I want to thank everybody for this opportunity. First and foremost, this is a very, very important topic globally. I want to let you know, I'm Dean Rose, CEO of Plasma Guard Corporation. Excuse me, to be short of sounding self-serving, I'm here for informational purposes really on this important topic and more cities, more governments need to really embrace this.

Our company has been dealing with submicron particulate removal in air spaces for over 50 years, mainly in outdoor harmful emissions all the way down to .004 microns in size. We focused that technology into indoor air quality about ten years ago. Same science and we've been able to not only address PM10 PM2.5, but all of our monitors are particulate monitors that we give away for free with our technology for every building is PM1.0 and smaller.

The obvious threat of harmful particulate is much smaller than one micron in size, certainly 2.5 cleans up a lot of stuff but the real harmful stuff is even smaller. You know I am only requesting opportunity

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to present these technologies in a much greater detail at a later date with all of your experts involved. We have been leading globally in submicron particulate removal pathogen destruction pathogen and activation destroying the outer protein lipid violators of not only virus, bacteria, fungus and mold protecting everyone from schools and in office buildings and nursing homes, and of course hospitals.

Because we really don't discriminate amongst pathogens. It could be anything from COVID to —

SERGEANT AT ARMS: Thank you so much. Your time

DEAN ROSE: Thank you.

has expired.

COMMITTEE COUNSEL: Thank you so much and please do submit your written testimony for the record so that we can consider it. We'll be moving onto Alia Soomro, you'll have two minutes and please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

ALIA SOOMRO: Good afternoon. My name is Alia

Soomro and I am the Deputy Director for New York City

Policy at the New York League of Conservation Voters.

Thank you Chair Schulman and members of the Committee

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on Health for the opportunity to testify. I've submitted longer written testimony. One of YLCV's top priorities is fighting for clean air, whether the source if toxic fossil fuels from our power, transportation or building sectors or wildfire smoke due to climate change.

For decades, low income and communities of color have faced the brunt of toxic air pollution due to environmental racism and historic disinvestment.

Because of the neglect these communities have faced,

New York City has one of the countries highest rates of asthma hospitalizations and deaths among children, young adults, African American and Latino residents and residents of high poverty neighborhoods.

On top of this, climate change is already exacerbating existing social, environmental, economic and public health disparities. For example, New Yorkers face a week of poor air quality when wildfire smoke from Canada blanketed our skies earlier this summer. Data from DOHMH shows that New York City zip codes with the highest numbers of asthma related emergency room visits were disproportionately in low income and predominantly Black and Hispanic communities.

As our planet experienced record breaking heat this summer, coupled with the fact that recent reports have indicated that wildfire smoke is rolling back progress on the Clean Air Act, New York must continue working to reduce poor air quality and mitigate its harmful impacts. We believe that the indoor air quality bills introduced by Council Member Powers at the request of Manhattan Borough President Levine are timely and necessary. Not only to improve the health of all New Yorkers but to combat the impacts of climate change and further environmental justice.

I want to iterate that these bills also align with the Administrations goals contained in Plan NYC getting sustainability done. That policy report includes developing new air quality monitoring program in 2024 as a priority.

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SERGEANT AT ARMS: Thank you so much. Your time has expired.

ALIA SOOMRO: Great. I've submitted longer written testimony. Thank you.

CHAIRPERSON SCHULMAN: Thank you very much.

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COMMITTEE COUNSEL: Thank you very much. We'll be turning to Hickma Abdul Goni. You'll have two minutes. Please wait for the Sergeant at Arms to

5 call time before you begin your testimony.

6 SERGEANT AT ARMS: Starting time.

COMMITTEE COUNSEL: Hickma Abdul Goni, are you

8 online?

HICKMA ABDUL GONI: Hello?

COMMITTEE COUNSEL: Yes, we can hear you. You may begin. Hickma, we can hear you. Hickma, can you hear us? Okay, we're going to go to our next panelist. Next, we'll hear from Alena Neganova.

HICKMA ABDUL GONI: Okay.

COMMITTEE COUNSEL: Oh — okay, let's move on to Delvina Nikonova while Hickma figure out her technical problems. Okay Delvina Nikonova, you'll have two minutes. Please wait for the Sergeant at Arms to call time.

SERGEANT AT ARMS: Starting time.

DELVINA NIKONOVA: Hi, my name is Delvina

Nikonova, I'm a Master's Educated Nurse from Columbia

University. I previously worked at the hospital for
a special surgery Mount Sinai as well as NYU Hospital
in the city.

I am in support of all these bills. I would also
like us to think about making sure that we are
consistently monitoring the Co2 to be less than 500.
And I really want us to be working to make clean air.
I think a lot of us were really terrified when we saw
the skies turn orange and I think that New York City
has the opportunity to be a leader in making clean
indoor air. We are you know the best city in the
country and we have the opportunity to be leaders in
this to make sure that our children and all us have
clean indoor air. Like once we fought for clean
water, we have the opportunity to fight for clean air
now both to prevent illness and also in terms of
changes regarding climate change. I'll be submitting
more in-depth written testimony but I think it's
important for all us to be thinking about how we felt
during that week and how frightening it was and how
we want to make sure that you know all of us have
clean air when we're in our apartments and in our
workplaces, especially as things like the Canadian
wildfire smoke will keep happening during the
summers.

COMMITTEE COUNSEL: Okay, thank you very much. We're going to try to go back to Hickma Abdul Goni.

1 COMMITTEE ON HEALTH 2 You'll have two minutes, please wait for the Sergeant 3 at Arms to call time before you begin your testimony. 4 SERGEANT AT ARMS: Starting time. HICKMA ABDUL GONI: Thank you for allowing me to 5 testify. I really appreciate you all looking at this 6 7 and taking this seriously and I would love this to happen much quicker than [LOST AUDIO [02:05:02]]. 8 COMMITTEE COUNSEL: Uhm, we're accidentally - I believe chambers is accidently muting. We're working 10 11 on a technical issue. Thanks for your patience. [02:05:16] - [02:05:28] 12 13 HICKMA ABDUL GONI: Hello, may I speak now? 14 [02:05:27] - [02:05:57] 15 COMMITTEE COUNSEL: We're currently having a 16 technical issue. Thank you for your patience. [02:06:00]- [02:07:20]. Uhm, okay, we're going to be 17 18 taking a quick break in this hearing to address 19 technical difficulties. Thank you all for your 20 patience and we'll let you know when we resume. 21 Thank you. [02:07:28] - [02:08:03]. Test, test. [02:08:03] - [02:08:11]. Okay are we ready to resume? 2.2 2.3 Okay, great. Okay, thank you everyone for your patience. We're going to resume. Apologies. We're 24

going to call up Hickma Abdul Goni one more time.

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Thank you for your patience. Please wait for the Sergeant at Arms to call time.

SERGEANT AT ARMS: Starting time.

HICKMA ABDUL GONI: Hello?

COMMITTEE COUNSEL: Yes, we can hear you.

Apologies, you may begin.

HICKMA ABDUL GONI: Okay, thank you so much for your patience with this. I think you may be able to tell, I'm a mom. I was literally getting my son off the bus so it got a little confusing for me but the reason I wanted to make sure I was on this call today and was able to testify in support of this bill is because I'm a mom of two children in public school. I'm also a registered nurse and I work in the public school system as a nurse during the worst years of COVID.

You know I was working for the Department of
Health and Legal Hygiene so I understand no rules.
We've been doing more with less a lot but we have to
set a standard to improve indoor air for the health
and safety of our children at school and that's where
they spend the majority of their day is indoors. Uhm
so you know we are living in a time where there's
more airborne challenges than ever uhm with pandemic

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this in the future. We have to set a standard now. We have to make a diagnosis now and do our best to
We have to make a diagnosis now and do our best to
mitigate the challenges that our children are facing

COMMITTEE COUNSEL: Thank you very much. At this time, we are now going to move to our last remote panel. We'll be hearing from Nancy Julius, Enova Sahu(SP?), Leah Olinick, and Gida Saba(SP?). I apologize if I mispronounce any of your names. First, we'll be hearing from Nancy Julius. You'll have two minutes. Please wait for the Sergeant at Arms to call time before you begin.

SERGEANT AT ARMS: Starting time.

in the future. Thank you.

COMMITTEE COUNSEL: Okay, Nancy is no longer on. We'll be moving on to Enova Sahu. Please wait for the Sergeant at Arms to call time before you begin.

SERGEANT AT ARMS: Starting time.

ENOVA SAHU: Hi. This is Enova Sahu and I am a resident of New York City in Manhattan and I just wanted to say that real time air quality monitoring is an extremely critical part of this bill and the fact that this is being overlooked by the DOE and DOH is unacceptable. Censors that measure Co2 Pm2.5 and

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PM10 can help us reduce the spread of infectious
disease, as many other experts have said today.
COVID is still a threat right now and we are
currently in a surge. We don't need to think about
the next pandemic, since we need the tools right now
and this year. This winter, we will have another
surge inevitably of COVID, RSV and flu and next
summer, we also inevitably will have more smoke from
wildfires from the north.

The only way to change this is real time air monitoring. Scores are not difficult to interpret.

I have no air quality credentials myself, yet they can be extremely helpful and they show green, yellow and red ratings. Red is bad, green is good. We all know what this means.

On a daily basis as a New Yorker who has a gas stove in my apartment, I open my window when my professional real time air quality monitor starts beeping or shows red. During the wildfire season, IEQ monitors enabled me to use air purifiers in my room effectively to know whether or not it was safe for me as an asthma patient. I could change the speed of my air purifiers to ensure that I was breathing quality air. And all residents of New

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York, as well as all children in schools and all patients in healthcare settings deserve this. As a patient of healthcare, as we all are, I have been in many doctors offices in Mount Sinai and NYU in Manhattan that do not have appropriate air quality. They have extremely high Co2 above the recommended rates of —

has expired.

SERGEANT AT ARMS: Thank you so much. Your time

CHAIRPERSON SCHULMAN: No, finish your thought. Go ahead.

ENOVA SAHU: Ultimately this is an imminent threat to health and making changes in the next five years is not soon enough. This is dissuading people like me from actively seeking healthcare since spaces with 4 IEQ have higher likelihood of transmitting viruses and pathogens, so the DOH and DOE need to act right now.

CHAIRPERSON SCHULMAN: Thank you very much.

COMMITTEE COUNSEL: Thank you very much. We're going to be moving on to Leah Olinick. You'll have two minutes. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

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LEAH OLINICK: Hi. My name is Leah Olinick, I am
a Public School Teacher and a parent to a toddler and
future public-school student. I'm also
immunocompromised due to a liver transplant and left
the classroom due to COVID spread in schools.
Finally, I'm also a climate organizer with Climate
Families NYC, a community of nearly 1,000 families
across the city who want our school buildings to be
healthy for all kids.

I'm here to express my support for Keith Powers bill to monitor indoor air quality in schools and ask it to go further. As a teacher, I've had students miss days or even weeks of school due to asthma or worsened by poor air quality from fossil fuel pollution. I also saw first hand that the Intel filters purchased by the city are ineffective and do not get used because they are too loud to teach over.

With more wildfire events to come due to the climate crisis and the continued spread of COVID, we need to not only monitor air quality but also urgently put a plan in place to improve indoor air in schools and public spaces.

I also ask that the bill be amended to include day cares, including in-home day cares and formal

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education spaces that often serve babies and toddlers
who are most vulnerable to air pollution. Thank you.

COMMITTEE COUNSEL: Thank you very much and we'll now move on to Gida Saba. You'll have two minutes.

Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

GIDA SABA: Hi Committee on Health. I come before you today as a concerned New Yorker and parent in support of these bills. Like many schools, the DOE building where my child spends his day is over 100 years old and has no HVAC system. The DOE we heard today recommends measuring air quality levels at the start of the day with no children present but that cannot provide useful data. I sent my child to school two weeks ago with a portable device to measure air quality and despite air filters on full blast, the Co2 readings have been incredibly dangerously high. Averaging for most of the day above 2,000 ppm of carbon dioxide and at one point during music class, reaching a dangerously high peak of 3,287.

To put this info into context, the recommended indoor Co2 level is typically below 600 ppm. My

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measurements were over five times higher. Not at all fine as the DOE rep earlier testified. Elevated Co2 levels can have detrimental effects on our health. Prolonged exposure can lead to headaches, dizziness, fatigue. It can impair ability to focus, concentrate and learn, making it increasingly difficult for children to excel academically. Studies have shown high Co2 levels result in significantly lower test scores on standardized tests.

Furthermore, inadequate air circulation turns our schools into breeding grounds for respiratory illness putting our children and educators at risk. The spread of COVID also impacts caregivers. For high-risk families like mine, we should not have to be petrified to send our children to school praying they don't bring home an illness that could hospitalize or kill us. Studies support these findings. High Co2 in classrooms is linked to significant increases in absenteeism, an issue that is critically effecting DOE schools today.

I would like to take a moment to thank our school for addressing this issue. After I raised this, windows were forced open that have been stuck closed for literally years and some improvements were made

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but levels still remain over 1,000 consistently and
we are still looking for solutions in several spaces.

Had I not had the resources to send a monitor to school with my child, no one would have even been aware. Access to resources should not determine the safety and wellbeing of our children. Real time air quality monitors are needed in all classrooms immediately. Teachers can open windows or —

CHAIRPERSON SCHULMAN: That's okay, finish your thought. Go ahead.

SERGEANT AT ARMS: Time expired. Thank you.

GIDA SABA: And so better air quality can be achieved. I'm horrified to think of all the other schools and classrooms with dangerous air quality levels currently that no one is addressing because no one or some guy in the morning is monitoring them.

I'm thrilled you are considering these bills. They will make our children and educators safer and I would just like to add, 18 months is way too long to wait. We need immediate action. 70 percent of household COVID cases originate with school exposures. We will lose many more New Yorkers to COVID during the next 18 months, lives that can be saved by taking swift action on this bill and we must

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set standards so that the DOE can't sit there and say, "oh, well, we're doing what we can." But actually do something to keep our kids and our educators safe. Thank you so much.

CHAIRPERSON SCHULMAN: Thank you.

COMMITTEE COUNSEL: Thank you. We're now going to calling on Sarah Putnam. You will have two minutes. Please wait for the Sergeant at Arms to call time before you begin your testimony.

SERGEANT AT ARMS: Starting time.

SARAH PUTNAM: Can you hear me? I'm getting a weird -

COMMITTEE COUNSEL: Yeah, we can hear you.

SARAH PUTNAM: Okay, great sorry. Thank you. My name is Sarah Putnam. I have a master's in public health from Columbia University. I strongly support the proposed legislation and I would like to say please pair this work with an immediate public education campaign on air quality and health. I've previously worked at the New York City Department of Health and Mental Hygiene including emergency response and I'm so disappointed in their antisurveillance, do nothing attitude today.

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Thank you Council Members for holding them to account and being the voice of public health in the room. Pathogens and particulates are present in our water; therefore we clean our water. Pathogens and particulates are present in air. We know these harm heath and cognition.

As a Public Health Scientist, to me it is clear that we should be giving the same attention to cleaning our air that we give to cleaning our water. Let me also share my experience as an informed citizen trying her best to stay healthy. As individuals are responsible for risk management now, I carry an Aranet4, carbon dioxide sensor to help me make health risk assessments as best I can in indoor settings with an imperfect tool.

When I took my daughter to Methodist Hospital ER this summer, it was comforting to see low Co2 readings while she was still vulnerable. In contrast, I struggle with accessing settings with high Co2 readings like gyms, public transportation, restaurants, cultural venues.

In Fall 2021, air quality mitigations were a critical driver for sending my children back to public school. Now, as those mitigations fall away

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during a still ongoing pandemic and my children are the one's who are plugging in classroom air filters or opening windows. Not their teachers, not their custodians, I find myself questioning a relationship with the school system for the first time.

A citywide real time systemic solution helps the entire city, which is fundamental to the meaning and duty of public health. And I'll leave you with this last anecdote.

Last month, my daughter reported an elevated Co2 reading to her principal. She carried the Aranet4 with her. The principal alerted custodial staff and within 20 minutes of her call, technicians arrived on site and diagnosed a problem with a belt in the ventilation system. My daughters real time air monitoring. Her principal's excellent response and the speed with which it was handled improved the air quality for the entire school community. That is what a healthy future looks like and that is what I hope this legislation an achieve on a citywide scale. Thank you Chair Schulman and all the Committee Members for hearing my testimony today.

CHAIRPERSON SCHULMAN: Thank you very much for testifying.

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COMMITTEE COUNSEL: Thank you. At this time, I'm going to call the names of folks who were not online at the time that they were originally to be called.

Nancy Julius, Lonie Portus(SP?), Marcine Boot(SP?),

Sandra G., Mary Tan, Demi Ajoul(SP?), Christina

Choi(SP?), Erica Russie.

Okay and at this time if there is anyone who is currently on Zoom who did not hear their name called but would like to testify, please indicate so using the Zoom raise hand function.

Okay, seeing no hands, we will turn it back over to the Chair for closing remarks.

CHAIRPERSON SCHULMAN: Thank you. First, before we end, I want to acknowledge that Marjorie, Council Member Marjorie Velázquez was on virtually. I also want to say that I am a proud Co-Prime Sponsor of the equality bills that were heard today. I want to thank the Administration for their testimony. I particularly want to thank the members of the public, many of whom are experts and we will be following up with them and I am very confident that we can come to some kind of resolution in getting these bills moved forward and passed in the Council.

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1	COMMITTEE ON HEALTH	128
2	And with that, I will close today's hear	ring.
3	Thank you to all. [GAVEL]	
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World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date OCTOBER 12, 2023