



**NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE**

**Michelle Morse, MD, MPH**  
*Acting Commissioner*

**Testimony**

**of**

**Michelle Morse, MD, MPH**  
**Acting Commissioner**

**New York City Department of Health and Mental Hygiene**

**before the**

**New York City Council**  
**Committee on Health**

**on**

**Legionnaires' Disease, Cooling Tower Inspections, and Keeping New Yorkers Safe**

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**City Hall**  
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Good morning, Chair Schulman and members of the Committee. I am Dr. Michelle Morse, Acting Commissioner and Chief Medical Officer of the New York City Department of Health and Mental Hygiene (the Health Department). I am joined today by our Deputy Commissioner for Environmental Health, Corinne Schiff. Thank you for the opportunity to testify today on the Department's response to a Legionnaires' disease cluster in Central Harlem this summer.

As the city's doctor, let me explain what Legionnaires' disease is—and is not. Legionnaires' disease is a serious form of pneumonia caused by *Legionella* bacteria that are ubiquitous in our environment and grow quickly in warm, stagnant water. It does not spread from person to person. It is contracted by inhaling 'mist' or 'water vapor' that contains *Legionella* bacteria, which can move invisibly through the air. People who are over the age of 50, smoke, and have chronic diseases or compromised immune systems are at greater risk. Legionnaires' disease is very effectively treated with antibiotics when it is diagnosed early.

Especially in the summer months, when we experience higher temperatures, *Legionella* bacteria can grow easily in cooling towers often located on top of buildings. Cooling towers are separate from indoor plumbing and potable water. Cooling towers are mostly used to remove heat from buildings and equipment. While they operate, they release mist into the open air outside. If the cooling tower is contaminated, that mist may carry *Legionella* bacteria. That is what happened this summer.

As part of the Central Harlem cluster, 114 people were diagnosed with Legionnaires' disease; 90 people were hospitalized; and tragically, seven people died. Any loss of life is too much. I offer my deepest condolences to the families and loved ones of the deceased.

At the Health Department, we do everything we can to prevent disease clusters from happening in the first place—and to respond urgently when they do. When it comes to Legionnaires' disease, New York City's prevention and response efforts include three connected types of work. The first requires owners of buildings with a cooling tower to comply with Health Department regulations and the local law this Council passed in 2015 and refined in 2019. That 2015 law was the first in the nation to set standards for cooling tower system maintenance. Today, New York City has among the most rigorous cooling tower oversight in North America. The current local law and Health Department regulations require building owners to register cooling towers with the City before beginning operations, conduct regular maintenance and monitoring of cooling towers, and test for *Legionella* bacteria every 90 days.

The second lane of work is that the Health Department conducts inspections of registered cooling towers to promote compliance with City law. We also provide cooling tower owners and operators with technical assistance and information on how to comply with the law. The third lane of work is our infectious disease surveillance system. Our team of epidemiologists monitors nearly 100 different diseases across New York City; data come in 24 hours a day, seven days a week. We are always monitoring for infectious diseases that could become major threats to the health of New Yorkers if not caught early. This surveillance system is the foundation of our disease control work. It is what allows us to quickly identify and respond to emerging threats in real time, as we did in

Central Harlem. Without this robust system, the Central Harlem cluster that we managed this summer could have been far, far worse.

Most cases of Legionnaires' disease are not related to a cluster like this one in Central Harlem. But our team of epidemiologists follows up on and investigates every case of Legionnaires' disease reported to us by laboratories and healthcare providers. Those case reports populate in our routine data surveillance system in real time. Our epidemiologists look for trends in that data that might indicate a cluster of cases, or an unusual number of cases in a particular area over a short period of time. That is how our team first became aware of a Legionnaires' disease cluster in Central Harlem on Friday, July 25<sup>th</sup>.

That same day that the cluster was identified, we alerted New Yorkers in a broad area of upper Manhattan to watch for flu-like symptoms. Our team of water ecologists began sampling cooling towers that Friday and worked during the weekend. By the end of the day on Monday, July 28<sup>th</sup>, all necessary water samples from more than 40 cooling tower locations had been collected and delivered to the Public Health Lab for analysis.

At the lab, all samples were tested with both preliminary PCR rapid tests and confirmatory culture tests. PCR rapid tests identify traces of *Legionella* bacteria. PCR testing is the 'first step' so we can quickly order the treatment of towers in an attempt to stop any potential spread of bacteria. PCR screening tests assess whether *Legionella* bacteria are present. They cannot distinguish whether the bacteria are dead or alive. Dead bacteria cannot make people sick. Culture testing is the gold standard, which is why it is an integral part of our process. It more precisely detects the presence of the strain of living *Legionella* bacteria, which can cause illness. However, culture testing takes up to two weeks to produce results—and getting actionable information quickly was very important. At every stage in our investigation, we take timely action with the available information to decrease risks.

In Central Harlem, eleven cooling towers had a positive result on the preliminary PCR tests. Buildings with initial positive results were directed to remediate their cooling tower by boosting or changing the biocide—the chemical used to kill the bacteria—or to do a full cleaning and disinfection. That work had to be initiated within 24 hours. All buildings completed that work by August 1<sup>st</sup>. About two weeks later, the confirmatory culture test results became available from our Public Health Lab. Those confirmatory results revealed 12 cooling towers with live *Legionella* bacteria. The Department required those 12 cooling towers to be fully cleaned and disinfected. All buildings implemented the requirements of our directive.

On August 14<sup>th</sup>, we released a list of 10 buildings with the 12 cooling towers that were 'positive' using the culture tests. Up until that point, we had not publicized which cooling towers were being treated. This was because, at this time, all individuals who had spent time in the affected ZIP codes were at risk for contracting Legionnaires' disease and we needed the public and providers to remain vigilant and monitor for symptoms. When the culture test results came back, we released the list of buildings with positive tests. We did that in the interest of full transparency.

Four of the buildings on that list are owned and operated by the City of New York. One of the cooling towers with live *Legionella* was at the Health Department's Central Harlem Sexual Health Clinic. That tower was newly installed in June of 2025. It was negative for *Legionella* bacteria upon installation, and yet the water sample taken as part of the Legionnaires' disease investigation was positive in July of 2025. As soon as we received the initial test results, we immediately cleaned and disinfected the tower. We are taking steps to mitigate the risk of undetected *Legionella* growth happening in our cooling towers again. New York City should be a model for the rest of the country and demonstrate the highest level of compliance with requirements designed to protect New Yorkers. We are in conversation with City Hall about how to promote compliance at all City-owned buildings.

By August 15<sup>th</sup>, all cooling towers that tested culture positive for *Legionella* had been treated. Harlem residents were no longer at heightened risk of Legionnaires' disease. We continued with genetic analysis to match the cooling tower samples with the samples from patients who might have inhaled the bacteria growing there.

To do that, our Public Health Lab experts compared the DNA in *Legionella* cultures grown from the cooling towers to the DNA in *Legionella* cultures grown from patient samples collected by doctors. That analysis revealed genetic matches. One of the locations is Health and Hospital's Harlem Hospital. The second is the construction site overseen by Skanska USA, contracted by the New York City Economic Development Corporation (EDC). Both buildings followed our direction to clean and disinfect their cooling towers. We are now requiring both locations to conduct further analysis and update their maintenance programs. There were no violations of the local law and regulation requirements at Harlem Hospital. At the construction site, the cooling tower was not registered as required and there were lapses in required maintenance, monitoring, and testing.

Pinpointing the two matched cooling towers and containing the exposure required following a rigorous scientific process. In total, our Public Health Lab performed more than 500 tests on patient and water samples related to this cluster. After we completed all testing and steps in the investigation, we can now confidently say that residents and visitors to Central Harlem are no longer at increased risk of contracting Legionnaires' disease. The last day anyone who visited, lives, or works in the area began experiencing symptoms was August 9<sup>th</sup>. Our epidemiologic evidence indicated that the cooling tower treatment was effective. On Friday, August 29<sup>th</sup>, we announced the end of the Central Harlem cluster investigation.

At every step along the way, we kept the public informed. Starting on July 25<sup>th</sup>—when we first learned about the cluster—until the closure of our investigation on August 29<sup>th</sup>, we 'sounded the alarm.' We urged all New Yorkers who live or work in the identified ZIP codes and who had flu-like symptoms to contact a healthcare provider immediately. On July 25<sup>th</sup>, we called local elected officials and community boards directly, published a press release, issued a Health Advisory to over 48,000 providers and public health practitioners making them aware of the cluster in Central Harlem, and shared information on social media.

Over the entirety of the investigation, our team ran ads on 140 Link NYC boards in Central Harlem and on eight popular NYC radio stations in English and Spanish. We created materials in multiple languages and handed out flyers in the neighborhood at fifteen different events—including one where I handed out fliers myself. Our East Harlem Neighborhood Health Action Center served as a critical community resource and a hub of information throughout the cluster. We made appearances in the press that yielded over 500 million impressions, more than 300 press hits, and at least 25 expert interviews. We provided updates at 12 elected briefings and five town halls or community meetings. We shared information in detailed social media graphics and answered New Yorkers' questions in videos on Instagram. We updated our website with new case, death, and hospitalization numbers daily. We sent e-blasts with critical information and updates to 18,000 partners in the impacted ZIP codes. And we coordinated with seven sister agencies to expand our reach. We leveraged every communication strategy at our disposal—in real time and across all platforms.

Our response evolved from simply getting the word out to combatting misinformation. There was misleading information that over-emphasized the risk of contracting Legionnaires' disease from inside a building with a contaminated cooling tower. We set the record straight: the risk during this cluster came from bacteria in cooling tower mist that is released from rooftops and moves like smoke from a fire through outside air.

We are living through a period of heightened distrust in public health. When competing narratives from outside voices are introduced to the public, it complicates our approach to sharing clear and consistent information. It also makes that work all the more important.

During the cluster, responding to Legionnaires' disease was my top priority. It has been an extraordinary effort across the agency, and I am proud of how our team met this moment. We were able to do that because we had the resources to support a multi-pronged approach. Without the existing investments in epidemiologists, analysts, laboratory experts, water ecologists, and community health workers, we would not have been able to respond as quickly or effectively and the impacts of this cluster could have been far worse. In the absence of adequate public health infrastructure, the exposures could have extended for days or even weeks before the problem was identified and addressed. A majority of our disease control funding is dependent on federal grants. If large-scale federal changes are enacted, we risk living through that reality in the next health emergency. We cannot always prevent crises from happening, but we can identify and respond to emerging threats to minimize their impact. New York City's existing investments in public health undoubtedly averted what could have been a far more devastating cluster.

Thanks to the Council's quick actions in 2015 during the South Bronx cluster as well as updates in 2019, New York City already has the most rigorous and protective laws surrounding *Legionella* testing in the country. The Health Department's capacity for Legionnaires' disease surveillance, epidemiologic investigation, and cooling tower testing is a model for other cities around the world. Other jurisdictions routinely look to us for our expertise. In fact, health officials in Ontario and Iowa recently reached out to learn more about our process as they also had large clusters this summer and fall.

That said, our preventative measures are designed as accountability checks for building owners' maintenance. The onus is on building owners to register any new cooling tower and be vigilant about conducting routine maintenance, testing, and treatment of their cooling towers.

Per New York City law, owners of buildings with cooling towers are required to conduct routine, ongoing maintenance and monitoring, including registering the cooling tower; monitoring the water quality at least three times a week; conducting a weekly check for overall bacteria levels and taking corrective action as needed; performing a summertime increase of biocide; and conducting a *Legionella* test every 90 days.

To promote compliance with these building owner requirements, the New York City Health Department's team of water ecologists conduct inspections. We aim to conduct inspections on each tower annually. We prioritize cooling tower inspections based on risk. For example, towers with a history of poor inspection outcomes or positive *Legionella* tests are ranked higher on our list for inspection. We also take into account 'population-based risk factors' for Legionnaires' disease. If the cooling tower is in a neighborhood with higher poverty and a significant population of older adults, that tower is also prioritized for inspection. Even with all these safeguards in place, *Legionella* bacteria are common in the environment and grow quickly in warmer conditions. Prevention requires owners to adhere to the mandates.

We can, of course, always improve upon our process. This summer's events only underscore the need to look at how we can further protect New Yorkers and work to ensure all requirements are followed. We recognize, too, that Upper Manhattan and the Bronx have shouldered a disproportionate burden of Legionnaires' disease clusters in New York City history.

There is no one cause of inequities in Legionnaires' disease—but there are a few different factors that contribute to that pattern. One is that Upper Manhattan and the Bronx have a high population density. Another is that these neighborhoods have experienced consistent, long-term, generational disinvestment due to structural racism. As a result, we see higher rates of chronic disease and differences in the built environment, which puts residents of these neighborhoods at an unfairly greater risk of Legionnaires' disease.

In public health, we use data, policy, and services to shape society and the environment, maximize health for all, and drive resources according to need. Our work in preventing and responding to Legionnaires' disease is no exception. At the end of August, the Administration proposed a package of resources and policy changes to further reduce the risk of future Legionnaires' clusters. They include: requiring building owners to test for *Legionella* every 30 days instead of 90; increasing fines for buildings that do not comply with regulations; and hiring more water ecologists to conduct inspections and community health workers who can ensure word gets out quickly if residents need to be alerted to public health risks.

In addition, the Health Department will conduct a full review of our existing rules so we can identify places to strengthen the preventative measures owners are mandated to follow. We are also planning a resource fair at the Central Harlem Sexual Health Clinic this Monday, September 22<sup>nd</sup>. Our intent is to let elected officials and residents know about all the Health Department

resources available in Harlem and that the community in Central Harlem is a priority for our city. Our partners will be onsite tabling and sharing materials about the services they offer. We will have information about our sexual health services, the East Harlem Health Action Center, job opportunities, on-site flu shots provided by Walgreens, and more. Our work to protect Harlem residents does not end with this investigation. We look forward to working with the Council to continue to protect the health of New Yorkers in every ZIP code.

Turning to the legislation under consideration today: Introduction 166 would require building owners to provide shower hoses and informational materials on Legionnaires' disease to tenants within 24 hours of notice of a tenant in the building having been diagnosed. We have suggestions for ways the bill can better target the concerns and look forward to working with Council.

Next, Introduction 434 would require building owners to implement an enormous program that seeks to address the risk of Legionnaires' disease relating to internal plumbing. The Legionnaires' disease cluster in Central Harlem was caused by a cooling tower and is not related to internal plumbing systems. There are very few cases of Legionnaires' disease in New York City that are known to be associated with internal plumbing. The Administration is opposed to this legislation and appreciates the already-ongoing conversations about ways to address the goals expressed by this bill. We look forward to discussing further solutions.

Lastly, Introduction 1390 would require owners to conduct more frequent *Legionella* bacteria testing in their cooling towers. We support this additional testing mandate and thank the Chair for this thoughtful change. We would like to discuss with the Council the ways to address any additional risks to bacteria growth associated with extreme heat. We look forward to working with you on this piece of legislation.

Thank you, Chair Schulman and members of the committee, for your attention to this issue. My colleagues and I are happy to take any questions.

## TIMELINE

- **July 1<sup>st</sup>:** Health Advisory issued jointly by NYS and NYC Health Departments for healthcare providers, healthcare facilities, clinical laboratories, and local health departments promoting awareness of legionellosis prevalence during the summer season, and symptoms, diagnosis, and treatment.
- **Friday, July 25<sup>th</sup>:** The cluster is identified, first [press release](#) goes out, and social media message posted. Local elected officials and community boards were notified and forwarded the press release
- **July 25<sup>th</sup> to July 28<sup>th</sup>:** Environmental Health inspectors conduct water sampling and inspections. NYC Health Department social media post
- **Week of July 28<sup>th</sup>:** Preliminary test results are returned and building owners with PCR positive cooling towers (11) have 24 hours to begin remediation. All building owners complied.
  - The NYC Health Department Digital Team creates and updates the gray box on the Legionnaires' webpage with daily confirmed cases and total deaths. Updated information daily at 4:30 p.m. through August 29.
  - The NYC Health Department community affairs team began canvassing in Central Harlem to alert the community of the symptoms
  - The NYC Health Department East Harlem Health Action Center tables outside of their office location at 115<sup>th</sup> Street, distributing flyers.
  - Bi-weekly situational briefing calls scheduled with local elected officials and community boards
  - Sister agencies serving vulnerable populations were forwarded press release and FAQs for distribution in their networks and sites in affected zip codes (DFTA, NYCHA, DSS/DHS, Parks and Rec)
  - DOHMH e-blast to approximately 18,000 partner CBOs in zip codes to widen information distribution
  - Daily social media posts
  - **Tuesday, July 29<sup>th</sup>:** Informed providers of the cluster and provided guidance on diagnosis, testing, treatment, and reporting
  - **Wednesday, July 30<sup>th</sup>:** The NYC Health Department sends out its [second release](#) on the cluster which alerts New Yorkers of the first death associated with the cluster
  - **Friday, August 1<sup>st</sup>:** NYC Health Department tabling and flyering at Benefits on Your Block in Central Harlem
  - **Saturday, August 2<sup>nd</sup>:** NYC Health Department tabling and flyering at Senator Cleare's health fair in district. NYC Health Department tabling and flyering at Harlem Week Senior Day
  - ***Culture testing continues and takes up to 2 weeks.***
- **Week of August 4<sup>th</sup>:** The NYC Health Department releases its 3<sup>rd</sup> press release with an update on positive PCR test results.
  - LinkNYC kiosks in affected ZIP codes (10027, 10030, 10035, 10037, 10039) broadcasting Legionnaires' information (run dates ongoing)
  - PSAs airing on radio stations (WINS – 1010 WINS, WXXB – The Block, WLTV – Lite FM, WWPR – Power 105, WSKQ – La Mega (Spanish), WPAT – Amor [Spanish], WXNY – Univision X96.3 [Spanish], and WADO – Univision Que Buena [Spanish]) broadcasting Legionnaires' information in English and Spanish (run dates thru Friday, August 22)
  - Distributed Legionnaires' social kit for elected officials
  - The NYC Health Department team continues to distribute fliers across the neighborhood.
  - Legionnaires' information forwarded to NYCPS for distribution at summer school programs and lunch access services at public schools in affected zip codes



- Legionnaires' information forwarded to DSS for supportive housing and congregate housing clients in affected zip codes
- Flyers shared with NYPD precincts and distributed during National Night Out
- Public Health Lab began DNA sequencing (*Please note: this process takes weeks*)
- **Wednesday, August 6<sup>th</sup>:** New York City Mayor Adams distributes fliers outside Harlem Hospital with NYC Health Department Deputy Chief Medical Officer Dr. Toni Essyallene and holds press conference to provide an update on the disease cluster
- **Thursday, August 7<sup>th</sup>:** Acting Commissioner Dr. Michelle Morse attends a press conference in Central Harlem with State Assemblymember Jordan Wright, State Senator Cordell Cleare, and City Councilmember Yusef Salaam
- **Friday, August 8<sup>th</sup>:** Acting Commissioner Dr. Michelle Morse distributes fliers in Central Harlem
- **Sunday August 10<sup>th</sup>:** Flying at Senator Cleare's event in Harlem (MTA train station renaming)
- Daily social media posts
- Bi-weekly situational briefing calls continue with local elected officials and community boards.
- **Week of August 11<sup>th</sup>:** Final culture test results return and building owners with confirmatory positive cooling towers (12) have 48 hours to complete cleaning and disinfection (extensive remediation). All building owners complied.
  - Public Health Lab continued DNA sequencing (*Please note: this process takes weeks*)
  - **Tuesday, August 12<sup>th</sup>:** Acting Commissioner Dr. Michelle Morse and NYC Health Department leaders join Senator Cordell Cleare for a virtual town hall on Legionnaires'
  - **Thursday, August 14<sup>th</sup>:** NYC Mayor Eric Adams and Acting Commissioner Dr. Michelle Morse hold a [press conference](#) to share the addresses of the 12 cooling towers with positive culture tests. Acting Commissioner Dr. Michelle Morse and NYC Health Department leaders join Public Advocate Jumaane Williams in an in-person town hall
    - The [fourth press release](#) by the NYC Health Department is released
  - Bi-weekly situational briefing calls continue with local elected officials and community boards
- **Week of August 18<sup>th</sup>**
  - **Sunday, August 17<sup>th</sup>:** Community presentation on Legionnaires' in Central Harlem at the Conversation Room at 653 Lenox Avenue
  - **Monday, August 18<sup>th</sup>:** Community presentation on Legionnaires' in Central Harlem at NYCHA St. Nicholas Houses standing meeting
  - **Wednesday, August 20<sup>th</sup>:** Senator Cleare's Senior Day event. NYC Health Department tabling including Legionnaires' flyers. Flyers and palm card drop off at Council Member's Salaam district office for a Thursday event at Touro College
  - Daily social media posts
  - Bi-weekly situational briefing calls continue with local elected officials and community boards