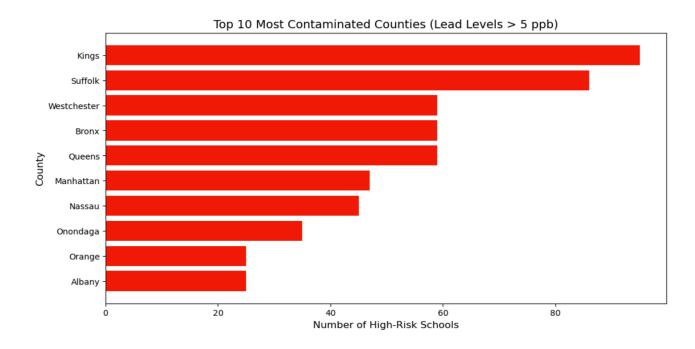
## **Lead Contamination in New York State Public Schools**

Lead contamination in school drinking water remains a significant public health concern in New York State. The presence of high concentration of lead in school water poses a high health risk, especially amongst children under the age of 11. This report analyzes high-risk schools, compliance status, remediation efforts, and the socioeconomic factors that influence the exposure of lead in these schools. The insights derived will support targeted marketing campaigns to promote lead testing remediation efforts effectively.

#### **Key Insights**

1. During the exploratory phase of our analysis, we identified the 10 most contaminated counties in New York, where lead levels in school drinking water exceed the state's safety threshold of 5 parts per billion (ppb). Pinpointing these high-risk areas allows us to prioritize intervention efforts, ensuring resources are allocated where they are needed most. Notably, three of the five most contaminated counties are located within New York City, underscoring the urgency of addressing this issue in the metropolitan region. Given the density of affected schools in NYC, a targeted marketing campaign within this area would be the most effective strategy to drive awareness, encourage testing, and expedite remediation efforts.

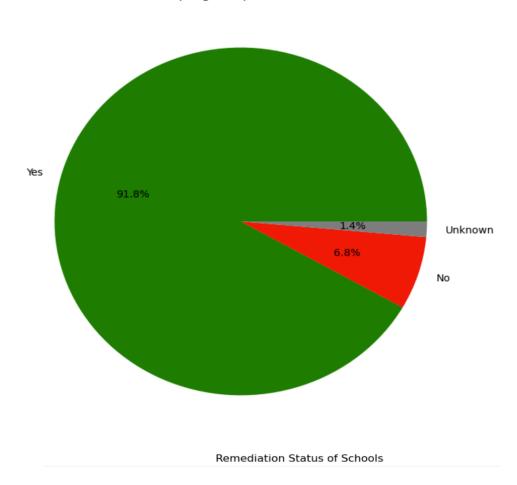


2. During our in-depth analysis, we examined the compliance status of public schools across New York State concerning mandatory lead testing in drinking water. New York State Law mandates all public schools test portable water outlets for lead contamination and take remedial actions if lead levels exceed 5 ppb. This regulation is enforced to safeguard students' health by ensuring the provision of safe water.

Our findings indicate that approximately 92% of schools have achieved an "approved" status for sampling completion, demonstrating commendable compliance with the state regulation. However, the remaining 8% of schools have either not received approval or are unknown status regarding their sampling efforts. This lack of compliance is concerning, an untested or inadequately tested water outlets may pose significant health risks to students and staff faculty.

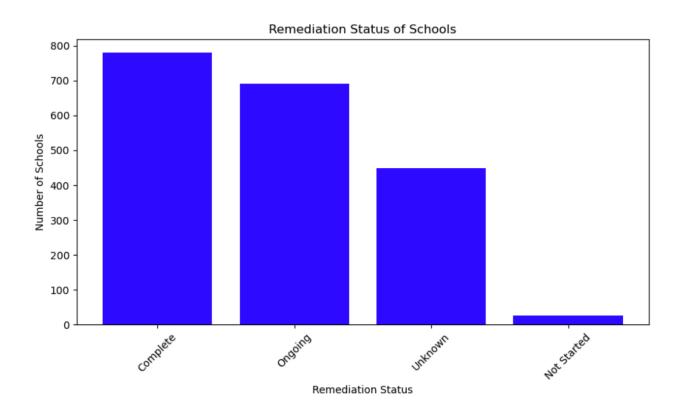
According to NYS Department of Health guidelines, schools are required to complete first-draw within the compliance period monitor every three years. Schools with incomplete testing are not only in violation of state regulations but also potentially jeopardize their communities well-being. Immediate action is imperative for the 8% of schools with incomplete or unapproved sampling. These institutions must prioritize lead testing and if necessary, implement remediation plans to address any detected contamination.





3. We segmented the data to examine the remediation status of public schools, categorizing them as completed, ongoing, unknown, or not started. A substantial number of schools are currently in the ongoing remediation phase, presenting an excellent opportunity to offer retesting services. Schools in this phase may require verification testing or visual inspections to ensure prior remediation efforts were

successful. Offering contract-based services to these schools, with incentives such as discounted pricing for recurring testing, can enhance long-term partnerships and secure continued engagement. Even among schools that have completed remediation, there remains an opportunity for future testing. Regular monitoring is necessary to ensure lead levels remain below the 5 ppb threshold, creating an avenue for offering ongoing testing services. Schools that have not started remediation efforts must be prioritized for immediate outreach, highlighting the importance of addressing contamination issues.



### **Marketing Strategy for Lead Testing Awareness & Remediation**

#### 1. Targeted Outreach

- a. Focus on the most affected counties and school districts
- b. Based on the given high risk areas, we can potentially dive deeper into the properties with older housing infrastructure.
- 2. Community Engagement & Education
  - a. Partner with local organizations, schools, and healthcare providers in high risk counties to spread awareness about the negative repercussions of lead contaminations
  - b. Provide multilingual educational materials to increase awareness
- 3. Digital & Social Media Campaigns
  - a. Utilize location-based ads to reach impacted families
  - b. Share real-time testing updates and success stories to encourage participation.

#### **Conclusion & Next steps**

The analysis highlights the urgency of addressing lead contamination in New York State schools. By integrating targeted marketing strategies with data-driven insights, we can enhance awareness, increase testing compliance, and drive remediation efforts.

#### Future steps:

- Expanding geospatial analysis to pinpoint high-risk areas even deeper
- Developing awareness strategies to support schools with limited resources.
- Strengthening community partnerships to sustain long-term efforts.

This report serves as a foundation for improving lead safety initiatives and ensuring healthier school environments for children across New York State. Conducting further research to examine correlations between high risk public schools and housing conditions in surrounding neighborhoods. Identifying overlaps between contaminated school water sources and residential lead exposure can help drive more comprehensive public health initiatives and targeted intervention programs.

# **DATA SOURCES**

<u>Lead Testing in School Drinking Water Sampling and Results: Compliance Period 2023-2025</u>