



## POLICY BRIEFING

# Legionnaires' Disease and Low Income Communities

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## SUMMARY

Legionnaires disease is a type of pneumonia caused by the legionella bacteria. Legionnaires's disease is not spread from person to person, it is spread through water droplets such as air-conditioning units, pools, hot water tanks, fountains, and drinking water. The chances of contracting Legionnaires' disease are much higher for individuals living in poverty and low-income housing. "Among community-acquired cases in New York City during 2002-2011, Legionnaires' disease incidence in the most impoverished areas was 2.5 times higher than in the least impoverished areas" (Hunter et al., 2022). Increasing healthcare access and the quality of low-income neighborhoods is important to alleviate the socioeconomic disparities in Legionnaires' disease incidence.

## CURRENT STATUS

- The NIH has guidelines on preventing occupational exposure to Legionella but no guidelines exist for homes.
- The CDC provides a guide on disinfection of hot tubs that contain Legionella.
- There are no current guidelines by the CDC or NIH on preventing Legionella outbreaks in homes.
- There are no current OSHA standards for Legionellosis.
- There is no current legislation on Legionnaires' disease.
- Legionnaires disease outbreaks are preventable, however, the best prevention method requires water management systems in buildings that ensure the water is carefully monitored and cleaned regularly.

## BACKGROUND

- Black Americans are disproportionately affected by Legionnaires' Disease compared to other racial groups and new cases are at least 60% higher among black people.
- In 2018, new cases were more than twice as high among Black people than other racial groups.
- Low-income Americans have higher rates of Legionnaires' Disease.
- People working in transportation, repair, cleaning, and construction are at increased risk.
- New cases of Legionnaires' Disease are elevated among diabetics and those with a history of pneumonia.
- New cases of Legionnaires' Disease are higher in areas with a higher percentage of vacant homes, rented homes, and homes built before 1950.
- New cases of Legionnaires' Disease are higher among those who live near construction sites and cooling towers.

## KEY CONSIDERATIONS

- **Socioeconomic Factors:** residents of low-income housing face disparities including limited access to healthcare, resources, and health information.
- **Housing Infrastructure:** many low-income housing residents and developments need better infrastructure such as aging plumbing systems, inadequate maintenance, and lack of water treatment. Issues with aging infrastructure and water heaters create favorable conditions for Legionella bacteria to grow.
- **Limited Access to Healthcare:** low-income communities and individuals do not have as much access to preventive care and timely treatment for respiratory infections. This often results in delayed diagnosis and treatment, ultimately increasing the illness's severity.
- **Underreporting and Surveillance Gaps:** Legionnaires' disease cases in low-income communities may be underreported, couples with low awareness of the disease, and many challenges are faced in the surveillance and reporting systems. Therefore, outbreaks in these communities may go undetected or have delayed public health responses.

## RECOMMENDATIONS

- **Improving Housing Infrastructure:** Advocate for increased investment in housing infrastructure and upgrades for low-income residencies including updated plumbing and water tanks. Call and write to your local and state representatives to advocate and vote for these issues to mitigate the risk of Legionella contamination.
- **Expand Access to Healthcare Services:** Support policies and programs that promote equitable access to healthcare for low-income individuals and communities, including Medicaid expansion and community health initiatives. These preventive measures of care and treatment are important for respiratory infections.
- **Increase Awareness and Education:** Participate in community outreach efforts to raise awareness about waterborne diseases and empower residents to take necessary measures to protect their health and well-being. Providing education on methods of decreasing humidity in the household. Supporting and launching public awareness campaigns to educate low-income communities about Legionnaires' disease symptoms.
- **Water Management:** Write to and encourage housing authorities, building managers, and companies to prioritize water quality monitoring and maintenance as routine facility management practices.
- **Advocate for Policy Change:** Communicate and engage with policymakers, local health departments, community leaders, and public health advocacy groups to prioritize health initiatives and policies that promote health equity and improve living conditions for vulnerable populations.

## REFERENCES

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