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Environment & Pollution

Detroit, MI

March 2024



Executive Summary

- Air quality in the city received the lowest rating, with 42% of respondents giving a Good or Excellent rating. Similarly, respondents were most concerned about the effect of poor air quality on their personal health, with 75% reporting that they were at least somewhat concerned. Finally, respondents most commonly reported that they believed air quality had gotten worse in the past 12 months (36%).

- Concern about air quality was highest among female respondents (77%) and respondents living in Districts 2, 4, and 6 (77–79%). Hispanic respondents and respondents in District 6 reported the highest air quality ratings (53% and 52%, respectively).

- Among respondents concerned about air quality, wearing a mask outdoors was the most commonly reported action taken (39%), followed by using air purifiers in their home (35%). Respondents most commonly reported believing that factories and other industrial sources are the main cause of air pollution in the city.

- Water quality received the highest rating from residents, with 59% of respondents giving a Good or Excellent rating. However, respondents reported being least concerned with excessive heat levels, with 62% of respondents reporting at least some concern. Respondents in Districts 2 and 6 reported the highest levels of concern about water quality, while Hispanic respondents reported the highest levels of concern about heat levels.

- Among respondents concerned about water quality, the majority of respondents reported only drinking bottled filtered water (61%). Among respondents concerned about excessive heat, the majority of respondents reported drinking more water (66%) or staying indoors during peak heat hours (53%).

Report structure

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02 Perceived Environmental Quality

03 Perceived Causes & Preventive Actions

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01

Methodology

Methodology

Sample

930 respondents were recruited online between **January 17th and March 10th, 2024,** using targeted ads on various platforms (e.g., social media, apps for Android and IOS) as well as online survey panels. Using data from the **US Census Bureau**, this survey employed quotas to match the distribution of **race, ethnicity, age,** and **gender** in Detroit, ensuring that the sample represents the entire population of Detroit.

Weighting

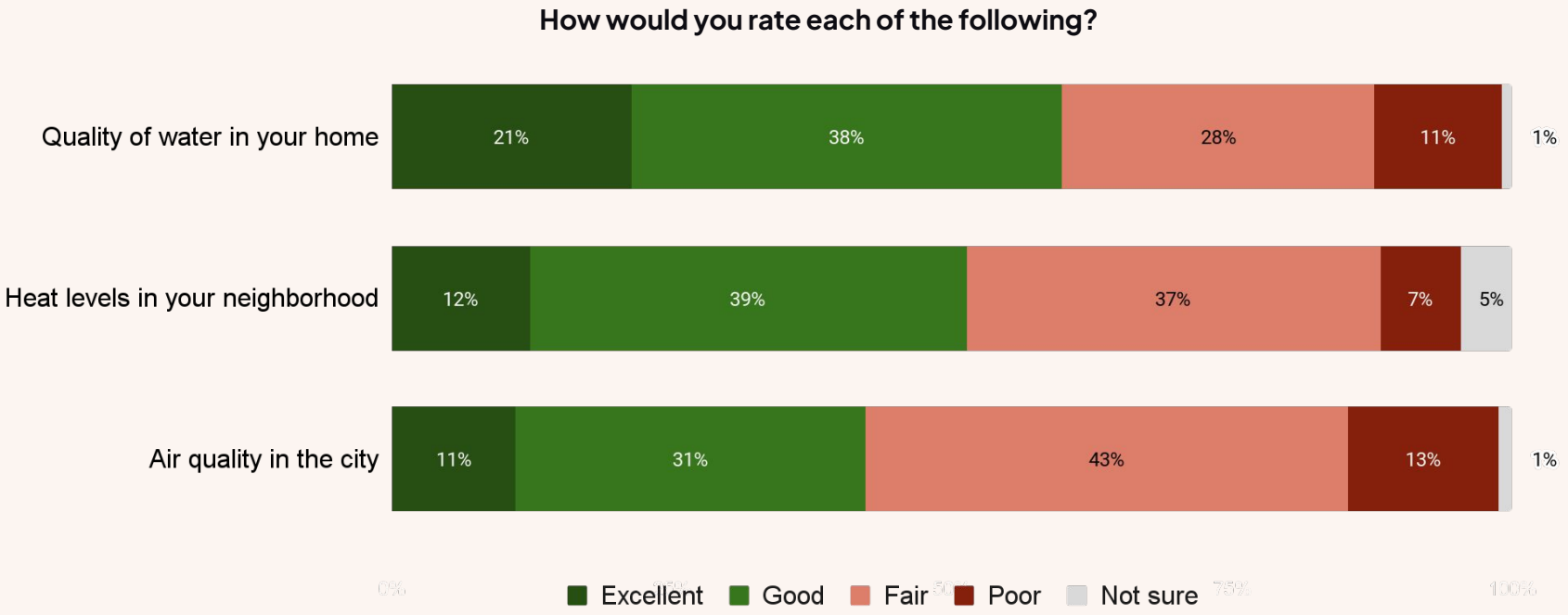
To make sure our sample is representative, a technique called **rake-weighting** was used to balance out any remaining differences between the makeup of the survey respondents and the community. This process serves as a **statistical safeguard** against any demographic group being overrepresented or underrepresented in the final score calculations by giving **overrepresented groups a lower weight** and **underrepresented groups a higher weight** in the analysis.

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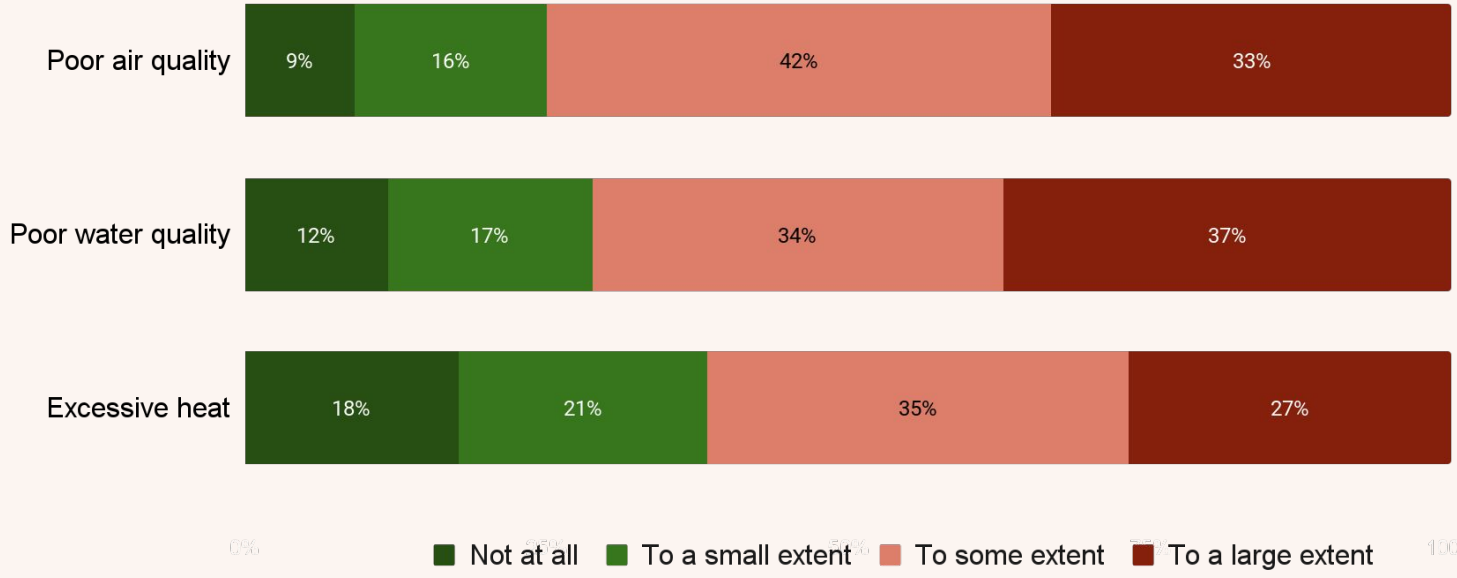
Perceived Environmental Quality

Current rating: The majority of respondents rated ‘Quality of water in your home’ and ‘Heat levels in your neighborhood’ as either good or excellent (59%, and 51%, respectively). ‘Air quality in the city’ was the most negatively rated, receiving a Good or Excellent rating from 42% of respondents.



Concern: Levels of concern were similar across all three listed issues, with a majority of respondents expressing at least some concern with all three. Respondents were most concerned about the effect of poor air quality on their personal health (75% concerned at least to some extent), and least concerned about excessive heat (62% concerned at least to some extent).

To what extent, if any, are you concerned about the effects of each of the following on your personal health?



Demographic breakdown: Quality of water received the highest rating across all analyzed demographic groups. However, percentages ranged from 52% (35–54 year olds) rating to 68% (Hispanic). Air quality received the highest level of concern from residents, with more than 70% of respondents across all demographic groups reporting being concerned to at least some extent.

Concern & Rating by Demographic

		Female	Male	18–34	35–54	55+	White	Black	Hispanic
Rating *(% of good or excellent)*	Air	39%	47%	47%	35%	44%	46%	42%	53%
	Heat	48%	**55%**	55%	49%	50%	54%	52%	**62%**
	Water	**57%**	**64%**	**62%**	52%	**64%**	**67%**	**59%**	**68%**
Concern level *(% of to a large extent or to some extent)*	Air	**77%**	73%	72%	**76%**	**75%**	73%	**76%**	74%
	Heat	61%	62%	65%	63%	56%	50%	64%	72%
	Water	73%	69%	72%	**75%**	67%	61%	73%	70%

Rating of 55% and above
Concern of 75% and above

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Geographic breakdown: Quality of water received the highest rating across all the analyzed districts, though the ratings ranged from 52% in District 1 to 67% in District 3. District 2 and District 6 were most concerned overall, with 79% and 77% (respectively) reporting that they were concerned about air quality and 76% and 80% (respectively) reporting that they were concerned about water quality in their home.

Concern & Rating by District

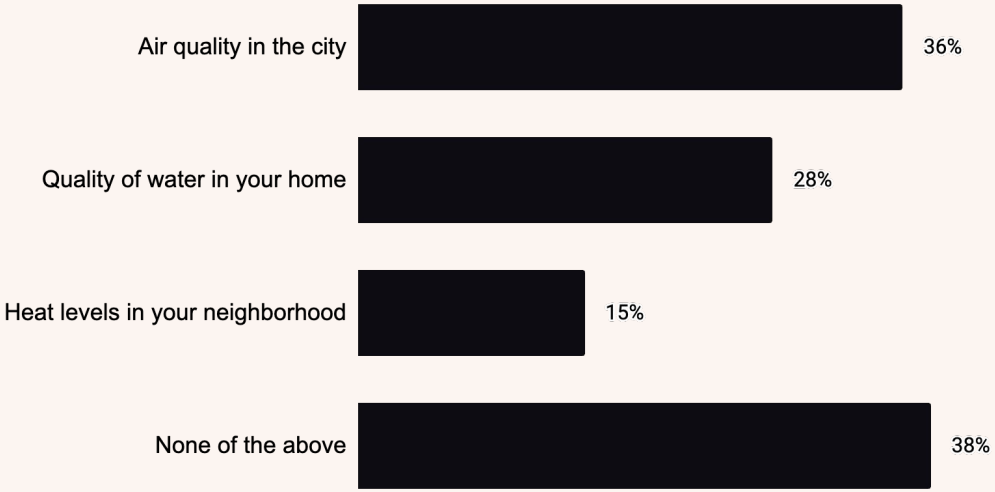
		District 1	District 2	District 3	District 4	District 5	District 6	District 7
Rating *(% of good or excellent)*	Air	35%	41%	48%	47%	40%	52%	35%
	Heat	44%	55%	**60%**	**58%**	40%	54%	46%
	Water	52%	**62%**	**67%**	**64%**	**59%**	**62%**	53%
Concern level *(% of to a large extent or to some extent)*	Air	72%	**79%**	75%	**78%**	72%	**77%**	72%
	Heat	61%	67%	58%	59%	66%	62%	60%
	Water	64%	**76%**	66%	72%	66%	**80%**	74%

Rating of 55% and above
Concern of 75% and above

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Change over time: Respondents most commonly reported that they believed air quality in the city had gotten worse in the past 12 months (36%). This was also the most common response in every area, though the percentage of respondents that reported this ranged between 41% in District 7 to 32% in District 5.

In your opinion, which of the following, if any, have gotten worse in the past 12 months?



	Air	Heat	Water
District 1	**36%**	15%	26%
District 2	**36%**	17%	26%
District 3	**39%**	11%	27%
District 4	**36%**	12%	31%
District 5	**32%**	19%	31%
District 6	**33%**	17%	24%
District 7	**41%**	15%	30%

Most common response in each area

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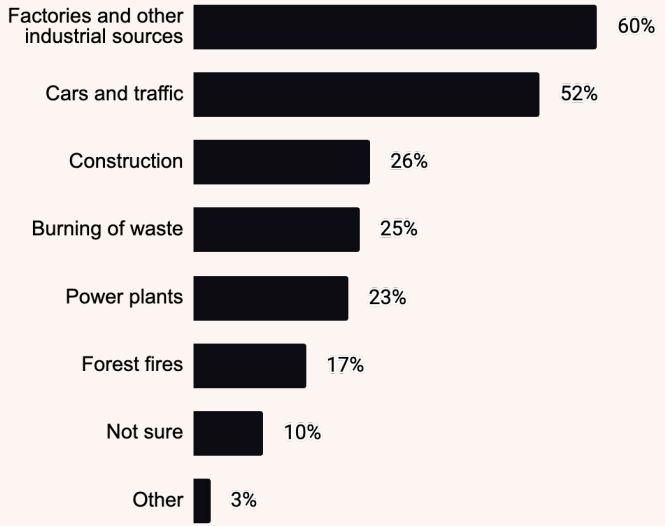
Perceived Causes & Preventive Actions

Air quality: Of respondents who reported being concerned about the effect of poor air quality on their personal health, around a third reported wearing a mask outdoors or using air purifiers in the home to reduce negative health effects (39%, and 35%, respectively). The majority of survey respondents believe 'Factories and other industrial sources' and 'Cars and traffic' are the main causes of air pollution in the city (60% and 52%, respectively).

[if concerned about effect] **Which, if any, of the following actions have you taken to reduce the potential impact/s of poor air quality on your personal health?**

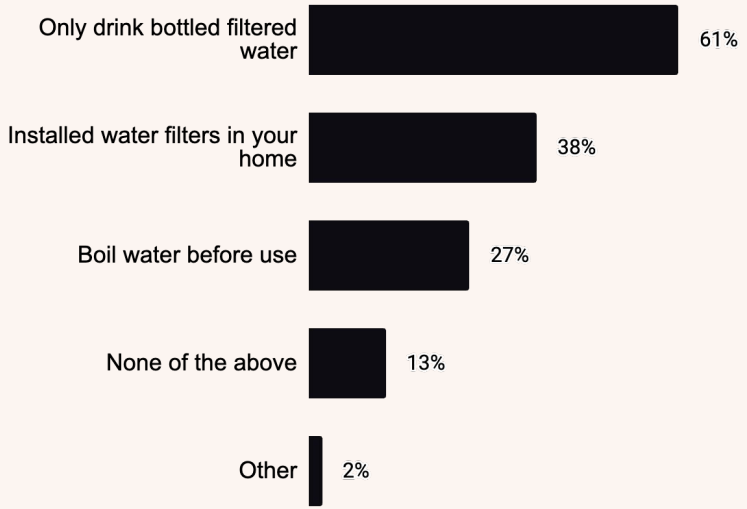


In your opinion, what are the main causes of air pollution in the city?

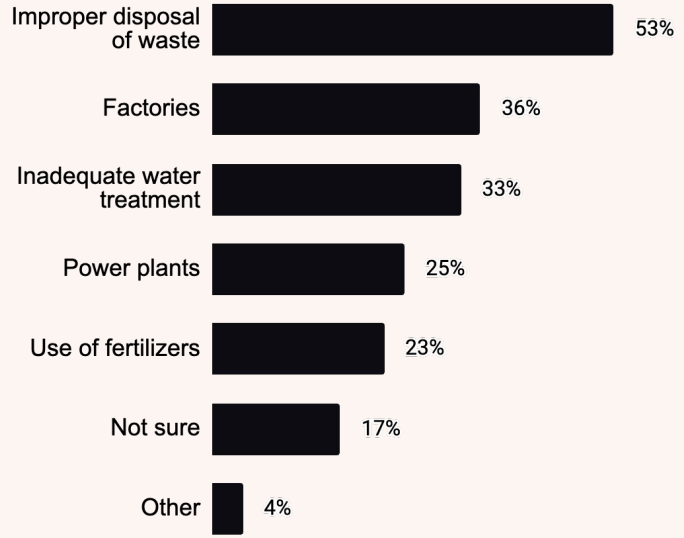


Water quality: Of respondents who reported being concerned about the effect of poor water quality on their personal health, the majority of respondents (61%) reported drinking bottled filtered water to reduce negative health effects. Over half of respondents (53%) believe improper disposal of waste is the main cause of water pollution in the city.

[if concerned about effect] **Which, if any, of the following actions have you taken to reduce the potential impact/s of poor water quality on your personal health?**

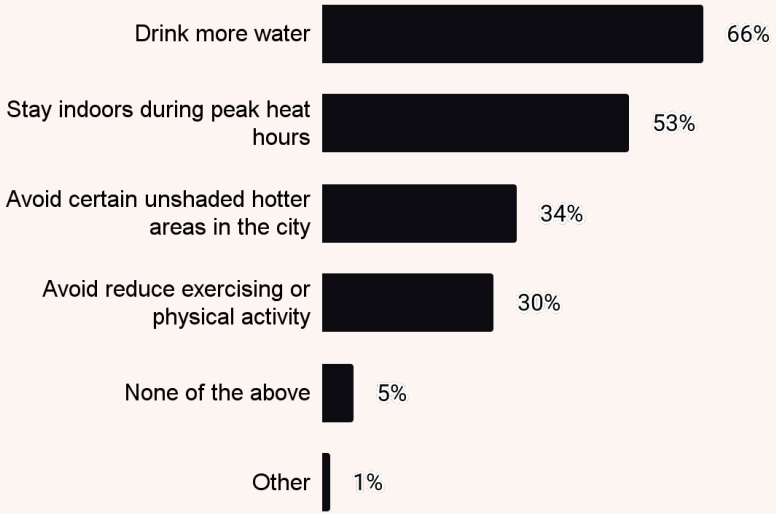


In your opinion, what are the main causes of water pollution in the city?

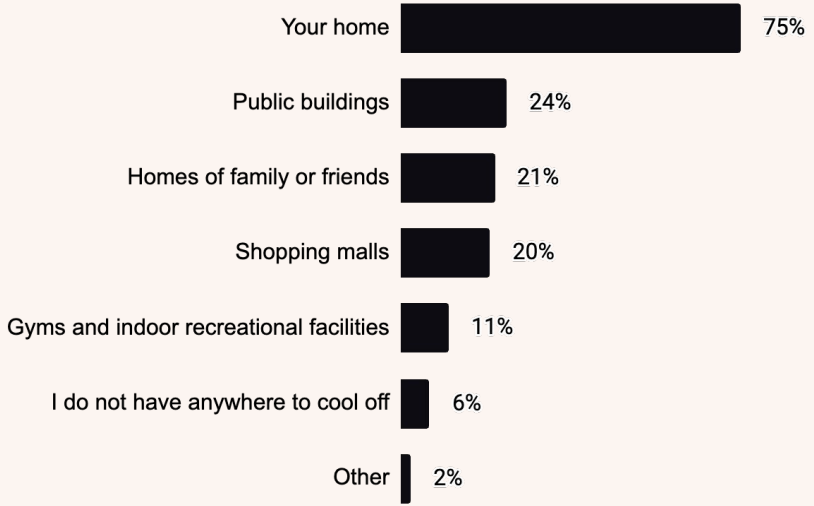


Excessive heat: Of respondents who reported being concerned about the effect of excessive heat on their personal health, the majority reported drinking more water and staying indoors during peak heat hours to reduce negative health effects (66%, and 53%, respectively). When asked about where respondents go to cool off in instances of excessive heat, 75% reported going to their home.

[if concerned about effect] **Which, if any, of the following actions have you taken to reduce the potential impact/s of excessive heat on your personal health?**



In instances of excessive heat, where do you go to cool off?



Additional concerns: Air quality was the most common concern among the open-text responses, followed by general health concerns, and global warming & weather events. Respondents across all three of those top categories also commonly commented about the need for more green spaces and reduced emissions.

What other concerns, if any, do you have about the environment and its effects on your health?



"Traffic, factories that release toxins into the Detroit River and other locations throughout the city. Toxic dirt and building demolition dust."

"Summers are getting hotter and more humid, it's so hard to breathe on those days. Winters are getting much warmer, it's really concerning."

"I would like to see more trees, parks, play area and green spaces for residents. In Detroit cars come first, pedistrians last."

"I think it could negatively affect my respiratory health or lead to melanoma due to damage caro the ozone layer"

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Summary

Summary

	Air quality	Water quality	Heat levels	
Rating *% of excellent or good*	42%	59%	51%	
Concern *% of to some extent or to a large extent*	75%	71%	62%	
Perceived worsening over past 12 months *% selected that has gotten worse*	36%	28%	15%	
Perceived main cause	**Factories & other industrial sources** 60%	**Improper disposal of waste** 53%	**Where they go to cool off**	**Home** 75%

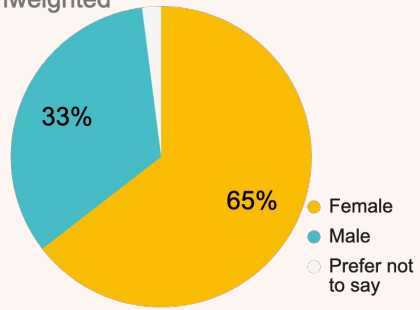
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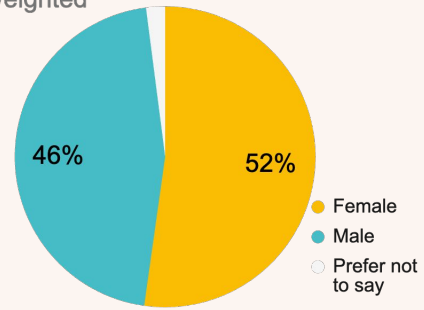
Sample Breakdown

Gender

Unweighted

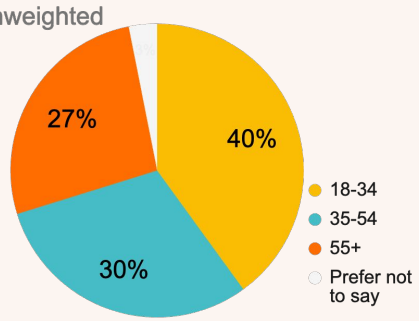


Weighted

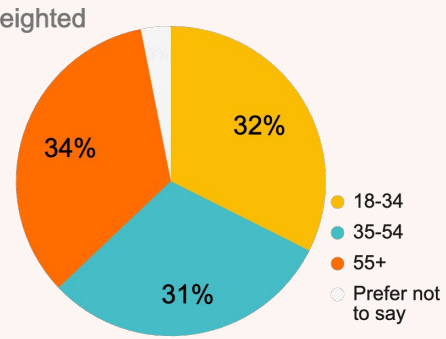


Age

Unweighted

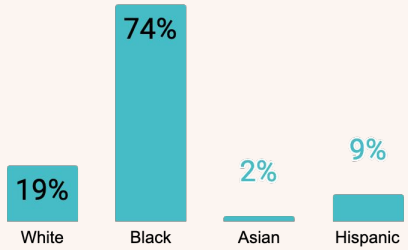


Weighted

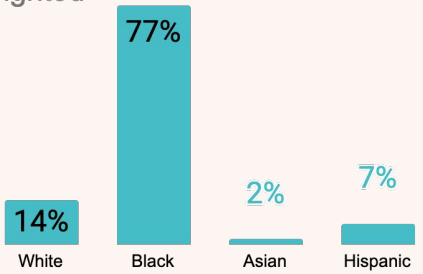


Race

Unweighted



Weighted



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Questionnaire

Link to questionnaire

Link to open text