



**A FIVE DOLLAR RAISE
COULD TRANSFORM
WALMART ASSOCIATES'
HEALTH AND WELL-BEING**



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Walmart associates have been demanding a \$15 base wage as well as commensurate wage increases for longer term employees for over a decade. In June 2021, Walmart executives refused a call from shareholders to raise starting associate wages to at least \$15 per hour.¹ As the largest retail industry leader in the world, Walmart can afford to pay associates more—especially as the company’s heirs’ wealth ballooned during the COVID-19 pandemic.² Hundreds of thousands of associates still earn below \$15 per hour, and no associate has received the \$5 an hour [hazard pay](#) that they have demanded throughout the pandemic.

This research brief looks at the massive benefits to public health and health equity that would result from a \$5 an hour wage increase at America’s largest employer.

The calculations derive from our application of peer-reviewed research studies and epidemiologic population-level datasets to health indicators of interest.

Specifically, we predict that a \$5 an hour wage increase at Walmart would lead to:

- An increase in the lifespan of associates by nearly 2 years
- More than 150 preventable low birth weight births annually
- An improvement in self-reported health status among associates
- A reduction in mental health symptoms among associates
- Improvements that would benefit women associates and associates of color the most

The research tells a compelling story: Higher wages at Walmart translate to better health and quality of life. And importantly, these benefits would primarily accrue to women associates and associates of color at Walmart— a step toward gender and racial equity.

ALL OF WALMART'S ASSOCIATES SHOULD BE MAKING A LIVING WAGE, AND WOMEN ASSOCIATES AND ASSOCIATES OF COLOR WOULD BENEFIT MOST

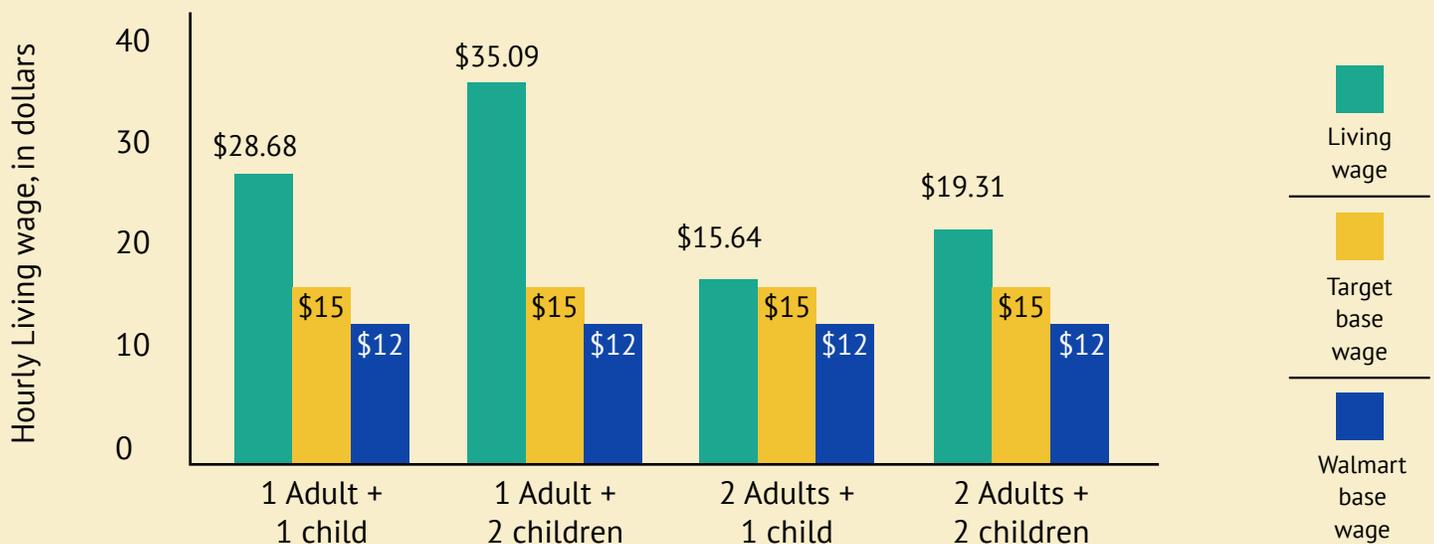
Walmart employs more women and people of color than any corporation in the US, yet the company's compensation practices do not live up to their stated commitment to racial equity.³⁻⁵ Associates of color and women are disproportionately concentrated in lower-paying and non-managerial positions—and hundreds of thousands of these associates will not benefit from the company's recent wage increases.⁶⁻⁸ The company is also unwilling to disclose details about if or how their diversity and inclusion practices address potential pay gaps based on race or ethnicity.⁹ Unsurprisingly, Walmart received an "F" on a Racial and Gender Pay scorecard.¹⁰

Walmart's recent base wage increase to \$12 per hour from \$11 per hour is still wholly inadequate for working families. This is particularly clear when drawing comparisons

to the *Massachusetts Institute of Technology (MIT) Living Wage Calculator*,* a tool that estimates the minimum standard of living costs for a region.¹¹⁻¹³ For example, in Texas, the state home to the greatest number of Walmart associates nationally, a single working adult without children would require a living wage of \$14 per hour to cover living expenses, and a single working parent with 1-2 children would need to make at least double this rate (see Figure 1 and Appendix for details).^{14,15} While Walmart's competitors, including Walgreens, Target, and Amazon, have raised base wages to at least \$15 per hour, none of these companies come close to providing families with a living wage.¹⁶⁻¹⁸ In fact, if an associate were working full-time at Walmart, they would accrue a salary of about \$19,000 a year—this is below the federal poverty line for families of three.^{19,20}

Figure 1. Walmart pay is far below living wage

Data sources: Massachusetts Institute of Technology Living Wage Calculator, Target, Walmart



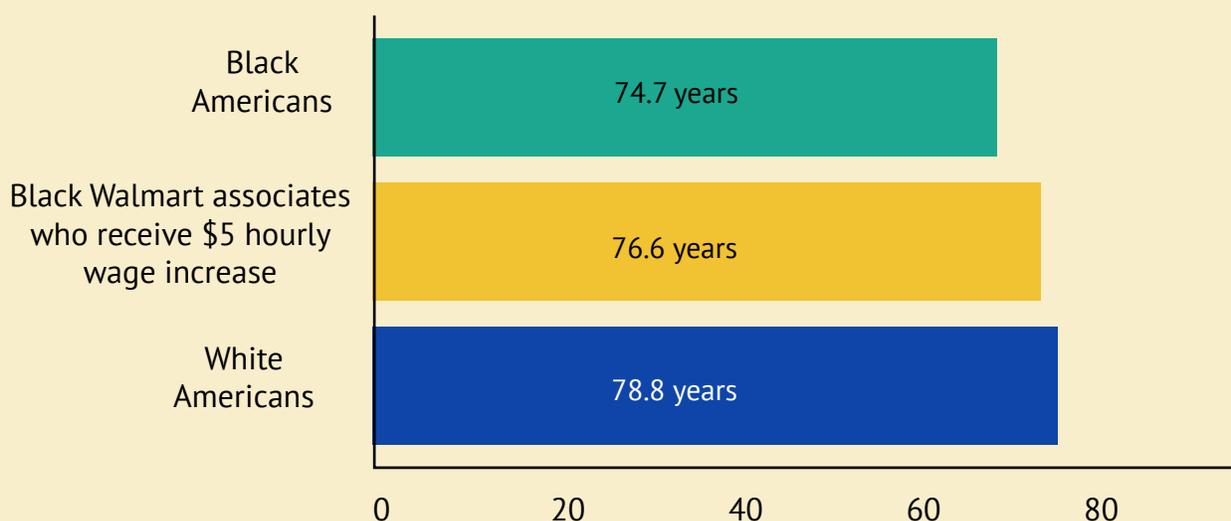
*The Massachusetts Institute of Technology Living Wage Calculator considers full-time to be 40 hours a week whereas Walmart considers 34 hours a week to be full-time. Therefore, the gap between "living wage" and "Walmart base wage" is likely slightly more narrow.

REDUCTION OF FINANCIAL STRESS RESULTING FROM WAGE INCREASES REAPS MEASURABLE BENEFITS TO INDIVIDUAL, FAMILY, AND COMMUNITY HEALTH

The statistical association between poverty and worse health outcomes is well-established according to decades of public health research.¹⁹ Access to higher income can reduce stress and mental health symptoms associated with food insecurity, housing insecurity, lack of access to affordable and quality healthcare, childcare, and other basic needs—and can therefore improve health across a range of outcomes for associates and their families.^{20–22}

Figure 2. A \$5 an hour wage increase will increase life expectancy for all Walmart associates

Data sources: Lenhart (2016); 2019 Vital Statics Data (CDC, 2021)



A \$5 AN HOUR WAGE INCREASE WOULD INCREASE THE LIFE EXPECTANCY OF WALMART ASSOCIATES BY NEARLY 2 YEARS

According to the Centers for Disease Control and Prevention, the life expectancy for Black Americans is about 75 years – almost 4 years less than for White Americans.²³ In a study published in the *European Journal of Health Economics*, health economist Dr. Otto Lenhart found that a 10% minimum wage increase results in a life expectancy increase of 0.44 years.²⁴ This indicates that a \$5 an hour increase from a base wage of \$12 per hour would increase the life expectancy of associates by nearly 2 years. Significantly, Black Walmart associates will see an increase in life expectancy to about 77 years (see Figure 2 and Appendix for details on calculations). Research demonstrates that low wage workers tend to benefit most from wage increases.²⁵ With women and associates of color disproportionately in typically lower-wage positions at Walmart, we expect the benefits of a wage increase to be most valuable to women and people of color—critical for health equity. By extension, a wage increase would help address gender and racial health inequities in quality of life and in health outcomes that are related to the health conditions that lead to premature mortality—particularly those related to circulatory and digestive system diseases.^{24,26}

A \$5 AN HOUR WAGE INCREASE AT WALMART WOULD PREVENT OVER 150 INFANTS FROM BEING BORN AT A LOW BIRTH WEIGHT EACH YEAR, AND PREVENT 6 INFANT DEATHS IN THE POSTNEONATAL PERIOD ANNUALLY

Harmful birth outcomes disproportionately impact people of color. For example, twice as many Black parents give birth to low birth weight babies than White parents.²⁷ These birth outcomes could have long-term repercussions for children and adults, including chronic health conditions.²⁷ In their 2016 research study published in the *American Journal of Public Health*, Komro, Livingston, Markowitz, and Eagenaar (2016) found that every dollar increase in wage corresponded with a 1-2% decrease in low birth weight births and a 4% decrease in postneonatal mortality.²⁸ We can predict that these same benefits will carry over to Walmart associates and their families in measurable ways with a \$5 an hour wage increase (see Appendix for details on calculations).²⁸⁻³⁰



A \$5 AN HOUR WAGE INCREASE WOULD DRAMATICALLY IMPROVE MENTAL HEALTH

Retail workers experience high levels of stress and mental health strain, and their exposure to stressors have heightened during the COVID-19 pandemic.³¹ According to the study by Reeves and colleagues (2016) published in *Health Economics*, people who receive a wage increase experience significant improvements to their mental health.³² Researchers indicate that the benefits are comparable to medication used to treat depression: “This improvement [is] comparable in magnitude to the effect [size] estimated for antidepressants on depressive symptoms.”

A longitudinal population-based research study published in *JAMA Psychiatry* that followed almost 35,000 adults over time confirms that people with higher household incomes have better mental health outcomes, particularly related to anxiety and depression.³³



A \$5 AN HOUR WAGE INCREASE WOULD RESULT IN 168,000 WALMART ASSOCIATES SELF-REPORTING THEIR HEALTH TO BE “GOOD”, “VERY GOOD”, OR “EXCELLENT” INSTEAD OF “FAIR” OR “POOR”

Self-reported health is predictive of chronic health and mortality outcomes according to an abundance of research literature.^{34,35} Nationally, according to the Kaiser Family Foundation, about 81% of adults report their health to be “excellent,” “very good,” or “good” (see Figure 4).³⁶ Recent research published in *Scientific Reports* by researchers at University of California Davis reveals that a \$1 increase in minimum wage resulted in at least a 2% greater chance that workers report their health to be good or excellent.^{37,38}

By extension, a \$5 an hour wage increase at Walmart would increase the proportion of associates reporting “good,” “very good,” or “excellent” health by 11%—which is equivalent to over 168,000 Walmart associates (see Figure 3 and 4, and Appendix for details on calculations). Black and Latinx adults are more likely to report “fair” or “poor” health than White adults. A wage increase would address this disparity, with the number of associates of color reporting better health increasing.³⁹

Figure 3. Adult Self-Reported Health Status in the United States

Data sources: Kaiser Family Foundation using data from the CDC Behavioral Risk Factor Surveillance System

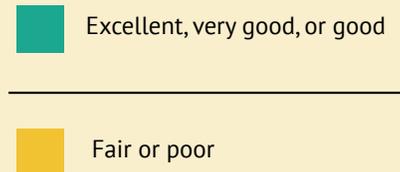
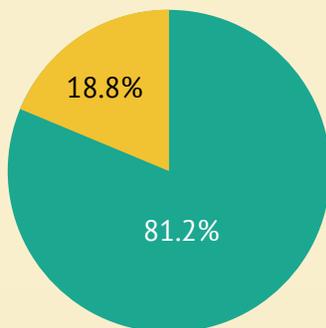
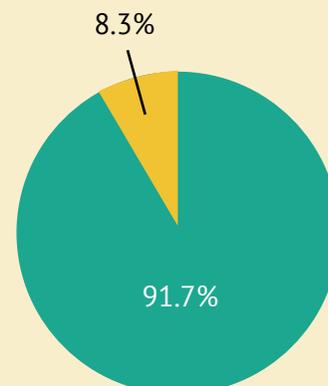


Figure 4. Walmart Associate Self-Reported Health Status with \$5 hourly Wage Increase

Data sources: Du & Leigh, 2018, CDC Behavioral Risk Factor Surveillance System, 2013



WALMART CAN LIVE UP TO ITS COMMITMENT TO RACIAL EQUITY BY INSTITUTING A \$5 AN HOUR WAGE INCREASE FOR ALL ASSOCIATES

Walmart's existing pay structure exacerbates inequities and is fueling an epidemic of poverty, with hundreds of thousands of associates and their families being forced to survive on unlivable wages. Associates are left to rely on public assistance while the company and its owners rake in record-breaking profits.^{40,41}

A \$5 an hour wage increase for Walmart's workforce would move associates closer to a livable wage. Further, the cost-benefit analysis literature points to little or no impact of wage increases on the labor market.⁴² Wage increases would improve the health of associates, the health of their loved ones and communities, and the lives of future generations. And increasing wages would effectively help close racial and gender wage gaps, in alignment with Walmart's self-professed commitment to racial equity.



Human Impact Partners (HIP) transforms the field of public health to center equity and builds collective power with social justice movements.

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Graphic design by Raina Wellman.

Photographs courtesy of United for Respect

Suggested citation: Human Impact Partners. A Five Dollar Raise Could Transform Walmart Associates' Health and Well-being. October 2021. Oakland, CA.

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We are deeply grateful to Blue Shield of California Foundation for their ongoing funding and support – without them, this work would not be possible. The views expressed are those of the authors and do not necessarily reflect the views of Blue Shield of California Foundation.

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Appendix

The calculations derive from our application of peer-reviewed research studies and epidemiologic population-level datasets to health indicators of interest. We use the total number of Walmart associates in the United States to understand the implications of a \$5 wage increase for associates. Because Walmart does not disclose information on the number of associates according to wage, position title, part-time vs. full-time status, or breakdown by race, ethnicity, or gender, these calculations are best estimates using the limited data available to us.

Figure 1:

The bar graph compares starting hourly base wages for associates at Target and Walmart, along with living wages for people living in the state of Texas. Target's starting base wage is \$15 per hour and Walmart's starting base wage is \$12 per hour.^{11,17} Texas living wage data for different configurations of family units is available from the Massachusetts Institute of Technology (MIT) Living Wage Calculator.¹⁴

Figure 2:

The bar graph compares life expectancy for Black and White Americans, along with the life expectancy for Black Walmart associates who would receive a \$5/hour wage increase from a base wage of \$12 per hour. Life expectancy data for Black and White Americans was retrieved from 2019 and 2020 Vital Statistics Surveillance data at the CDC.²³

According to Lenhart (2016), a 10% increase in minimum wage was shown to increase life expectancy by 0.44 years.²⁴

- A \$5 wage increase from a base wage of \$12 results in a \$17 wage, which is the equivalent of a 42% wage increase ($\$5/\$12 = 0.4167$)
- A 42% wage increase will increase life expectancy by 2 years ($42\%/10\% = 4.2$; $4.2 \times 0.44 \text{ years} = 1.85$ or nearly 2 years)

Assumptions:

- Research findings by Lenhart (2016) can be applied to the current context of interest with respect to geography, timeframe, and population
- Black Walmart workers have the same life expectancy as Black Americans overall
- The life expectancy estimates of Black and White Americans from 2019 and 2020 hold true for 2021 and beyond

Calculations on low birth weight and post-neonatal mortality:

Low birth weight is defined as a birth weight at or below 2500 grams.⁴³ Postneonatal mortality is defined as death between 28 days and 1 year of age.⁴⁴

Komro, Livingston, Markowitz, and Eagenaar (2016) found that “a dollar increase in the minimum wage above the federal level was associated with a 1% to 2% decrease in low birth weight births and a 4% decrease in postneonatal mortality” in the US.²⁸ We estimate that with a \$5 an hour wage increase, we would expect to see a maximum 10% decrease in low birth weight births ($\$5 \times 2\% = 10\%$) and 20% decrease in postneonatal mortality ($\$5 \times 4\% = 20\%$). We confirmed with a health economist research that a dose-response type of relationship can indeed be applied to a scenario where Walmart associates receive a \$5 an hour wage increase (Dr. Otto Lenhart, personal communication July 9, 2021). We estimated the number of preventable low birth weight births and infant lives saved from

postneonatal mortality by extrapolating US population level data on these birth outcomes to Walmart associates:

Low birth weight calculation:

- According to the CDC, 8.31% of births in the US were low birth weight in 2019.⁴⁵
- The US birth rate was 11.4 births for every 1000 people among the broader population in 2019.³⁰ Walmart employed roughly 1.6 million associates in 2019.⁴⁶ Per a population of 1.6 million people, we estimate 18,024 total births among Walmart associates per year ($11.4/1000$ births per people \times 1.6 million people = 18,240 births)
- We estimate that 1,515 of these total births were low birth weight births ($18,240$ total births \times 8.31% low birth weight births = 1,515.74 low birth weight births).
- A \$5/hour wage increase would reduce the number of low birth weight births by 10%.²⁸ This is equal to 151 preventable low birth weight births among Walmart associates ($1515.74 \times 10\% = 151.57$).

Post-neonatal mortality calculation:

- According to the CDC, the average postneonatal mortality rate was 1.90/1000 births in the US in 2019.⁴⁵
- From above, we estimated 18,024 total births among Walmart associates per year. Per 18,024 births, we estimate approximately 48 postneonatal mortality infant deaths for associates at Walmart ($18,024/1000 = 18.02$; $18.02 \times 1.90 = 34.25$)
- A \$5/hour wage increase would reduce postneonatal mortality by 20%.²⁸ This equals nearly 7 preventable postneonatal deaths at Walmart ($34.25 \times 20\% = 6.85$).

Assumptions:

- Research findings by Komro (2016) can be applied to the current context of interest with respect to geography, timeframe, and population
- Population level birth rates and birth outcome rates are the same as rates for Walmart associates
- Population level birth rates and birth outcome rates from 2019 hold true for 2021 and beyond

Note: The final estimates of projected preventable poor birth outcomes among Walmart associates are likely an underestimate. Because Walmart employs a disproportionately greater number of women, people of color, and compensates near poverty wages, the prevalence of poor health outcomes are likely higher as the research literature demonstrates strong associations of these adverse birth outcomes among these groups. Additionally, retail workers who earn near poverty wages are likely to have limited health care access and experiences of gender and race-based discrimination (which are underlying factors to poor birth outcomes).²⁷

Figures 3 and 4: The pie charts compare reports of “good, very good, and excellent” health between US general population reports and expected reports for Walmart associates benefiting from a \$5 an hour wage increase.

Du and Leigh (2018) found that “a \$1 raise in the minimum-wage resulted in a 2.1 percent increase in the probability that workers would report themselves to be in good, [very good]** or excellent health” (**verified through personal communication with the original authors as described in the article by Science Daily).^{37,38}

- A \$5 increase in the minimum wage would result in a 10.5% increase in the likelihood of employees reporting “good, very good or excellent” health ($\$5 \times 2.1\% = 10.5\%$).
- Population level data indicates that 81.2% of US adults report good, very good, or excellent health.³⁶
- We estimate that a 10.5% increase in “good, very good, or excellent” health equates to 91.7% after receiving a \$5/hour wage increase ($81.2\% + 10.5\%$).
- With a population of roughly 1.6 million associates, we estimate that this increase will benefit 168,000 Walmart associates ($10.5\% \times 1,600,000 = 168,000$).⁴⁶

Assumptions:

- Research findings by Du and Leigh (2018) can be applied to the current context of interest with respect to geography, timeframe, and population
- We assume that population level data on self-rated health can be applied to the population of Walmart associates