

State Minimum Wage





Evidence Review Findings: Effective / Roadmap Policy

A state minimum wage of at least \$10 per hour can boost earnings and family incomes with minimal or no adverse effects on employment, leaving families better off overall and contributing to better birth outcomes and parent health. Higher state minimum wages also reduce racial disparities in poverty.

State minimum wage policies establish a floor for workers' hourly wages. Although the federal minimum wage requires that most hourly workers be paid at least \$7.25, states can individually establish higher minimum wages; currently, 30 states set wage floors greater than \$7.25, with some as high as \$15. By increasing pay for low-wage workers, a higher state minimum wage may expand low-income families' access to basic resources, helping to lift them out of poverty and alleviate parental stress. In turn, reduced stress and an increase in access to resources may improve short- and long-term outcomes for infants and toddlers by reducing the likelihood of adverse early experiences such as poor birth outcomes or abuse and neglect. Although some research projects positive impacts of *local* minimum wage increases as high as \$12 to \$15, most of the empirical evidence on minimum wage increases that have been implemented *statewide* extends to \$10, demonstrating that higher wages improve families' economic security, including reducing child poverty, and can support healthier birth outcomes.

Decades of research in the field of child development have made clear the conditions necessary for young children and their families to thrive.¹ These conditions are represented by our eight policy goals, shown in Table 1. The goals positively impacted by a state minimum wage of at least \$10 are indicated below.

Table 1: Impacts of the State Minimum Wage on Policy Goals

Positive Impact	Policy Goal	Overall Findings
	Access to Needed Services	Mostly null impacts on health care access
	Parents' Ability to Work	Mixed impacts on employment
	Sufficient Household Resources	Mostly positive impacts on earnings and child poverty
	Healthy and Equitable Births	Positive impacts on birthweight and infant mortality
	Parental Health and Emotional Wellbeing	Mostly positive impacts on adult mental and physical health
	Nurturing and Responsive Child-Parent Relationships	No strong causal studies identified for this goal
	Nurturing and Responsive Child Care in Safe Settings	No strong causal studies identified for this goal
	Optimal Child Health and Development	Mixed impacts, with positive impacts on neglect and long-term health

What Are State Minimum Wages?

State minimum wage policies are legislative mandates setting a floor for the hourly wage that employers can pay their workers. The United States has had a federal minimum wage since the Fair Labor Standards Act (FLSA) was enacted in 1938, and it currently stands at \$7.25 (with exceptions for tipped workers, teenagers early in their employment, and some workers with disabilities).⁴⁴ The federal minimum wage has not increased since 2009, but recent bills have proposed phasing in an increase to \$15 by 2025.^{2,3} States can legislate their own higher minimum wages, and as of October 1, 2020, 30 statesⁱ will have adopted and implemented minimum wages higher than \$7.25.⁴ Minimum wages represent a policy lever to ensure a basic standard of economic wellbeing for all workers and to prevent exploitation by employers, but recent state increases in the minimum wage have also been proposed as a mechanism to reduce poverty and improve the standard of living for low-wage workers and their families.

Who Is Affected by State Minimum Wages?

According to the US Bureau of Labor Statistics, 2.3 percent of hourly workers earn at or below the federal minimum wage of \$7.25.⁵ With a \$7.25 hourly wage and a 40-hour work week, a full-time minimum wage worker would earn just \$15,080 each year, which is below the poverty level for two-, three-, and four-person households.⁶ The recent approved increases in state and local minimum wages to between \$12 and \$15 per hour are expected to cover over 20 percent of US workers once fully in effect.^A According to the Economic Policy Institute (EPI), if all states raised their minimum wages to \$15 by 2024, 40 million workers and 14.4 million of their children would benefit from higher household incomes.⁷ The EPI estimated that 40 percent of single parents and 67 percent of workers currently living in poverty would see a raise, and the US Congressional Budget Office (CBO) estimated 1.3 million fewer people would be in poverty.⁴⁴ Women and workers of color would be disproportionately affected by minimum wage increases to \$15 because they comprise a large share of those currently paid under that level.⁸ The CBO estimated in a 2019 report that if all states raised their minimum wages to at least \$10 per hour, 1.5 million workers would see their wages increase, family income would increase by \$400 million for those who would otherwise be in poverty, and this option would lead to a smaller decrease in employment than a \$12 or \$15 federal minimum wage.⁴⁴ Currently, 19 states have minimum wages of at least \$10.⁴

What Are the Funding Options for State Minimum Wage Increases?

The costs of minimum wage increases are typically absorbed by employers. Raising the state minimum wage may save taxpayer costs, however, by boosting earned income and reducing the amount of support lower-wage workers may need from public assistance programs.^{E,Y} See the subsequent sections of the summary for further discussion of potential economic effects.⁹

Why Should Higher State Minimum Wages Be Expected to Impact the Prenatal-to-3 Period?

Advocates for state minimum wage increases expect that raising the wage floor will boost the incomes of low-wage workers and their families, and in some cases lift them out of poverty. Higher family incomes can, in turn, lead to better social, economic, and health outcomes for parents and children. Greater access to resources such as housing, food, health care, and transportation can lower parental stress, improving a child's caregiving environment and reducing the likelihood that a child will experience abuse, neglect, or other adverse experiences at home.¹⁰ Higher minimum wages may also facilitate greater health care access, which can reduce the prevalence of low birthweight and adolescent births and increase prenatal care use, all of which may positively impact children's later health outcomes.

Some scholars expect that to pay for higher wages, employers will have to cut the number of jobs or work hours for low-wage workers, with detrimental impacts on employment and family income that may offset the increased wages.¹¹ This argument is one of the most commonly cited (and empirically tested) objections to minimum wage increases in the literature. Other scholars contest this position and suggest that better-paid workers will be more productive, reducing turnover and costs associated with hiring and training new workers.¹² Still others argue that some reductions in work hours

ⁱ State counts include the District of Columbia.

measured after a minimum wage increase may reflect a rational choice by workers to work fewer hours, and gain leisure time, while still earning the same overall income given the higher hourly wage.⁴⁰

Another anticipated effect of an increased minimum wage is that prices will increase, passing the cost of the higher wage to consumers, or that employers will cut the wages of higher-income workers to compensate for the increases for lower-wage workers (called “wage compression”). Some scholars worry about the impact of higher minimum wages on the child care industry, specifically the possibility that employers will raise child tuition to cover higher employee wages.¹³ If a higher minimum wage incentivizes greater employment among some parents, by making “work pay” to a greater degree, then access to affordable and high-quality child care becomes even more critical.^{42,43}

Higher wages may also push families just over the income eligibility level for child care subsidies or other benefits, preventing them from receiving support even when they still need it. Some scholars argue that the state minimum wage is not a well-targeted policy lever for reducing poverty, given that many minimum-wage workers, such as adolescents working a part-time job, may belong to high-income households. The empirical evidence addressing these considerations is presented later in this summary.

What Impact Do State Minimum Wage Increases Have, and for Whom?

Historically, most of the research on minimum wage policy, both federal and state, has focused on economic impacts such as income and employment effects. Very limited research, until the past decade, has examined how minimum wage increases impact child and family poverty, birth outcomes, and parent and child health, but the emerging evidence finds mostly positive impacts in these areas. Most of the studies in this review examined incremental increases in the state minimum wage, such as the impacts of a \$1 increase,^L a 10 percent increase,^H or a given increase above the federal level in the state minimum wage,^J rather than examining the impacts of a particular minimum wage level.

However, a review of the state data included in the studies found that most of the empirical evidence revealing beneficial impacts extended to minimum wages as high as \$10. This review found some positive impacts for minimum wages as high as \$15,^{M,P} but such studies tended to employ simulations and estimates projecting future impacts, rather than examining the effects of increases that had already been implemented, or they were focused on specific localities (e.g., New York City, Santa Clara County) rather than statewide increases. More statewide research on the effects of a \$12 to \$15 minimum wage, as more states implement wages in this range, will be valuable for confirming the threshold that provides the greatest impact to families with the least detrimental impacts on employment. Not every study in this review focused exclusively on parents when examining outcomes such as employment or adult mental health, but subgroup results for parents or households with children ages 0 to 3 are presented when available.

The research discussed here meets our standards of evidence for being methodologically strong and allowing for causal inference, unless otherwise noted. Each strong causal study reviewed has been assigned a letter, and a complete list of causal studies can be found at the end of this review, along with more details about our standards of evidence and review method. The findings from each strong causal study reviewed align with one of our eight policy goals from Table 1. The Evidence of Effectiveness table below displays the findings associated with the state minimum wage (beneficial, null,ⁱⁱ or detrimental) for each of the strong studies (A through BB) in the causal studies reference list, as well as our conclusions about the overall impact on each studied policy goal. The assessment of the overall impact for each studied policy goal weighs the timing of publication and relative strength of each study, as well as the size and direction of all measured indicators.

ⁱⁱ An impact is considered statistically significant if $p < 0.05$.

Table 2: Evidence of Effectiveness for the State Minimum Wage by Policy Goal

Policy Goal	Indicator	Beneficial Impacts	Null Impacts	Detrimental Impacts	Overall Impact on Goal
Access to Needed Services	Prenatal Care Use	Q			Mostly Null
	Health Insurance Coverage		Z		
	Child Has Usual Place for Medical Care		Z		
	Visits to a Doctor		Z		
Parents' Ability to Work	Employment	C, K, Y	A, D, F, G	I, M, V, X	Mixed
	Hours Worked		G, Y	I, V	
Sufficient Household Resources	Earnings/Income	A, E, F, K, M, Y		I	Mostly Positive
	Wages	D, G, I, M, V			
	Poverty	E, G, K, M, Y	O		
	Child Poverty	E, G, Y, AA			
	Access to Credit		W*		
	Household Debt		W		
	Auto Loan Debt			W	
	Rental Default	N			
	Public Assistance Receipt	E, Y	O		
	Material Hardship		O		
Healthy and Equitable Births	Birthweight	J, Q ⁺			Positive
	Infant Mortality	H, J			
	Adolescent Births	B			
	Preterm Births		Q		
Parental Health and Emotional Wellbeing	Reductions in Adult Mortality	P			Mostly Positive
	Smoking During Pregnancy	Q			
	Rates of Sexually Transmitted Infections	BB			
	Obesity		U		
	Diabetes		U		
	Hypertension		U		
	Self-Reported Health		U		
	Adult Suicide Rate	S, T			
	Drug-Related Mortality		S		
	Serious Psychological Distress		U		

Table 2: Evidence of Effectiveness for the State Minimum Wage by Policy Goal (continued)

Policy Goal	Indicator	Beneficial Impacts	Null Impacts	Detrimental Impacts	Overall Impact on Goal
Optimal Child Health and Development	Neglect	L			Mixed
	Physical Abuse		L		
	Missed School Days Due to Illness/Injury	R			
	Long-Term Health	R			
	Parent-Reported Health		Z		

* Study W found a marginally significant ($p < 0.10$) increase in access to credit for all households in the sample, but found statistically significant ($p < 0.05$) increases in access to credit for those with low credit scores (below 660) and young borrowers (those age 35 and below) following a minimum wage increase.

* Study Q found a 1 percent decrease in the probability of low birthweight, a small increase in birthweight (grams) and fetal growth rate, and an insignificant increase in gestational age following a minimum wage increase.

Access to Needed Services

Only one study examined the effects of a higher minimum wage on prenatal care use, but results were promising, though modest.⁹ The authors found that a \$1 increase in the state minimum wage led to a 2 percent increase in the number of prenatal care visits, a 5 percent decrease in the likelihood of having fewer than five visits, and a 1 percent increase in the likelihood of accessing care in the first trimester.⁹ A 2019 study examined the impact of higher minimum wages on children's health care access, finding overall null results for the likelihood of health coverage, having a usual place to receive medical care, and frequency of doctor's visits (e.g., child saw a doctor in the past year, child had more than one visit in the past year, child had a checkup in the past year).⁷ Subgroup analyses revealed results in various directions—children with immigrant parents were marginally more likely to have seen a doctor more than once in the past year, but significantly less likely to have had a checkup in the past year with a higher minimum wage.

Parents' Ability to Work

Evidence suggests that overall, state minimum wage increases have mixed effects on employment and hours for low-wage workers, with most increases leading to insignificant effects on employment.^{A,D,F,G} Most studies that have found detrimental impacts have examined specific cities or industries, have examined levels between \$13 and \$15, or have found very small effect sizes that may be outweighed by increased wages, leaving families better off overall.^{I,M,V,X}

Three studies suggest that minimum wage increases may have small beneficial impacts on employment, particularly for disadvantaged groups. One of the earliest and most widely cited studies examining state minimum wage increases was a 1994 analysis of the fast food industry in New Jersey and neighboring Pennsylvania.^C The study found that employment in New Jersey, which had raised its minimum wage by 80 cents, actually increased 13 percent relative to Pennsylvania, which did not raise its wage. A 2011 study found that coupled with a 10 percent earned income tax credit (EITC) supplement, a state minimum wage that was 25 percent higher than the sample mean produced a significant 2.2 percent increase in employment for single mothers with no college degree compared to a minimum wage at the sample mean.^K A 2019 study found that a 10 percent increase in the minimum wage boosted, by 4 percent, the likelihood that children of mothers with no college degree had a working parent, with the greatest effects for children ages 0 through 5 (an increase of 7 percent).^Y

Four studies have found null impacts of increased minimum wages on employment. A 2018 study of six cities with recent minimum wage increases to greater than \$10 found that the employment impacts associated with a 10 percent wage increase ranged from a 0.3 percent decrease to a 1.1 percent increase.^A A national 2019 study found that over the time period from 1979 to 2016, minimum wage increases led to an insignificant employment increase of 2.8 percent,^D and a 2010 study by some of the same authors had found similarly null results, concluding that the employment impacts were

“indistinguishable from 0”^F (p. 945). Another 2019 study found null effects, with results trending in both positive and negative directions depending on the subgroup examined (e.g., teens, adults with less than a high school degree, etc.).^G Four studies have found negative impacts on employment resulting from higher minimum wages. A 2018 study of Seattle’s gradual increase from \$9.47 to \$13 found a loss of 5,000 jobs and a 6.9 percent decrease in hours worked, which outweighed the 3.2 percent net increase in wages.^I The first phase of the increase, from \$9.47 to \$11, had no significant impact on employment. Another local study, estimating the impacts of a new \$15 minimum wage in Santa Clara County, California, known as Silicon Valley, predicted that 1,350 fewer jobs would be created annually as a result of the increase.^M However, the study also predicted a reduction of 8.2 percent in poverty, and all cities in the county implemented new minimum wage increases in 2020, with some as high as \$16.05.¹⁸ A study focusing on the retail sector in the US found that a 10 percent increase in the minimum wage was associated with a 2.6 percent decrease in full-time retail employment, but the wage increase had no significant effect on the employment of part-time workers.^V Finally, a 2019 study examined how minimum wage increases affect restaurant employment in various states, and the authors found an overall 0.2 percent decrease in employment for every 1 percent increase in the minimum wage when results across states were pooled.^X The authors noted that this pooled effect masks the differences the study found in states across the country, most of which saw no negative effects on employment.

Sufficient Household Resources

Evidence from six studies^{A,E,F,K,M,Y} suggests that minimum wage increases lift earnings for low-wage workers, leaving workers better off overall given the mostly null or small effects found for employment discussed above.¹⁹ A 2018 study of six cities with minimum wages over \$10 found that a 10 percent increase in the minimum wage increased earnings between 1.3 and 2.5 percent,^A and a 2019 national study found that minimum wage increases were associated with significant increases in family income, particularly for lower-income families who are most likely to benefit from an increase in the wage floor.^E In particular, the author’s estimates, based on state minimum wages from 1984 to 2013, indicated that if all states were to raise their minimum wages to \$12, the US would see a 1.9 percentage point (or 15 percent) reduction in poverty, representing 6.2 million people transitioning out of poverty. The author also projected a 12.2 percent (\$1,826) annual increase in after-tax-and-transfer family earnings among the lowest-income families (those near the 10th percentile).^E

Another national study, in 2010, found significant positive earnings elasticities that suggested a 1.5 to 2.3 percent increase in earnings for a 10 percent increase in the state minimum wage.^F A 2011 study examining the combination of a higher minimum wage with the earned income tax credit found that a 10 percent increase in the minimum wage, coupled with a 10 percent state EITC,ⁱⁱⁱ led to an 8.3 percent increase in earnings for single mothers.^K The 2019 study of Santa Clara County mentioned above also predicted an earnings increase of 19.4 percent for workers previously making under \$15, if the wage floor were raised to that level.^M A 2019 study focusing specifically on parents found a significant increase in earned income (\$349 in annual earnings) for families headed by single mothers following a 10 percent minimum wage increase.^Y Only the 2018 Seattle study found negative effects on overall income; the authors estimated a total annual loss of \$72 million after factoring in decreased employment and hours worked.^I

Results are mostly positive for the effects on poverty, with six studies finding reduced child or overall poverty, and one study finding an insignificant, though beneficial, effect.^{E,G,K,M,O,Y,AA} A 2019 study found a significant reduction in poverty linked to 10 percent minimum wage increases, with large effects for children—a reduction in poverty of 4.9 percent for those under age 18.^E Significant, large effects were also found for Black and Latinx^{iv} individuals (reduction in poverty of 8.7 percent), and people under age 30 without a high school degree (4.3 percent).

A second 2019 study found that higher minimum wages led to significant reductions in child poverty (1.3 percentage points) in regions of the country with the lowest median wages,^v where proportionately more individuals benefited from minimum wage increases.^G The minimum wage/EITC study mentioned above also found that the earned income tax

ⁱⁱⁱ The study did not require the 10 percent supplement to be refundable in this analysis, but the authors noted that over 80 percent of the families in the sample who lived in states with an EITC were in states with a refundable EITC.

^{iv} The referenced report used “Latino” rather than Hispanic, suggesting that the analysis may have included individuals from Latin American countries whose primary language is not Spanish (e.g., Brazil).

^v In particular, the study found that the reduction in child poverty was significant in regions of the country where the ratio of the minimum wage to the median wage was 0.6 or greater.

credit's poverty-reduction effects are amplified by a higher minimum wage; the authors concluded that a 10 percent state EITC supplement reduced poverty among single-mother families with children by 1.6 percentage points at the sample mean of the state minimum wage, but reduced poverty by 2.3 percentage points when the minimum wage was 10 percent higher than the mean, and by 3.4 percentage points when the minimum wage was 25 percent higher than the mean.^K The Santa Clara study predicted an 8.2 percent reduction in poverty, as mentioned above.^M Another 2019 study found that a 10 percent increase in the minimum wage reduced poverty by 0.6 percentage points, or 5.9 percent, among children with parents with no college degree.^Y The effects were found to be greatest (9.6 percent) for children under age 6. Finally, a 2008 study found that a 10 percent increase in the real minimum wage (adjusted for inflation) reduced the child poverty rate in single mother-headed families by 1.8 percentage points.^{AA}

Findings for other measures of economic security, such as access to credit, household debt, and material hardship, are more mixed. A 2019 study found that a 10 percent increase in the minimum wage boosts successful credit applications by an insignificant 7.7 percent, but effects were significant for borrowers with low credit scores and young borrowers, who may be more affected by minimum wage increases.^W The study also found a significant 20.8 percent decline in household debt for those with low credit scores, with null effects for the overall sample. Another 2019 study found that a 1 percent increase in the minimum wage was associated with a 2.6 percent decrease in rental default.^N A third study found null effects of minimum wage increases on the likelihood of participating in public assistance programs, such as food and rental assistance, and on the likelihood of reporting difficulties meeting expenses, paying rent, and affording medical coverage.^O Two other studies, however, found significant reductions in receipt of public benefits alongside reduced poverty and higher earned income, suggesting that families achieved better economic security after minimum wage increases despite the reduction in benefits.^{E,Y}

Healthy and Equitable Births

Although a large research base links greater overall income and wealth to better health across the life span, comparatively few studies have examined the relationship between higher minimum wages and birth outcomes.^{20,21} However, four recent studies, discussed below, have begun to build the evidence base in this area with modest results in the positive direction.^{B,H,J,Q}

A 2016 study used data on birth outcomes from 1980 to 2011 across the US and found that state minimum wages that were higher than the federal floor were significantly associated with reduced prevalence of low birthweight and infant mortality. In particular, each dollar above the federal minimum wage was linked to a 1 to 2 percent decrease in prevalence of low birthweight and a 4 percent decrease in infant mortality.^J A 2018 analysis examined 46 million births to women with a high school degree or less between 1989 and 2012 and found that a \$1 minimum wage increase was linked to a significant 1 percent decrease in low birthweight births, and a 4.04 gram (0.1 percent) increase in birthweight, but the wage increase had small, insignificant effects on reducing the number of preterm births.^Q A second 2018 study found that a 10 percent increase in the minimum wage was associated with a 3.2 percent reduction in infant mortality among mothers with a high school degree or less.^H

Research also suggests a link between higher state minimum wages and reduced teen births. A 2017 study of birth rates in the US from 2003 to 2014 found that a \$1 increase in the state minimum wage was associated with a 2 percent decrease in adolescent births.^B Although the findings in these studies trend in the positive direction, more research is needed to corroborate the results as states continue to increase their minimum wages to untested levels. The highest minimum wages in these studies were in the \$9 to \$10 range.

Parental Health and Emotional Wellbeing

Evidence for how higher minimum wages may impact adult health is mixed and supported by fewer studies than the economic outcomes discussed above. However, some promising results are emerging. A study of adults in New York City estimated that a \$15 minimum wage, had it been implemented at the time, may have prevented between 2,800 and 5,000 premature deaths (deaths before age 65) between 2008 and 2012.^P As of December 31, 2019, both large and small employers must adhere to a minimum wage of \$15 in New York City.²² A 2018 national study of mothers and infants found that a \$1 increase in the minimum wage was associated with a 7 percent decline in maternal smoking.^Q A 2020 study found null effects on adult health outcomes including diabetes, hypertension, overall health, and obesity for the overall sample, although women saw an increased likelihood of diabetes with a higher minimum wage, men saw a higher

likelihood of obesity, and men saw a lower likelihood of hypertension.^U The authors suggested that a variety of mediating factors complicate the link between higher pay and health; for example, outcomes like obesity may have genetic contributions, and some individuals may not have access to health coverage even with a higher wage. Finally, a 2019 longitudinal study using 13 years of data found that a \$1 increase in the state minimum wage led to lower rates of sexually transmitted infections (STI) among women; the authors measured between an 8.5 percent and 19.7 percent drop depending on the STI.^{BB}

Three causal studies have examined links between the state minimum wage and adult mental health, finding positive results. A 2019 study examined the effects of higher minimum wages on suicides, estimating that a 10 percent increase in the minimum wage may reduce non-drug suicides among adults with at most a high school degree by 3.6 percent.^S The authors also examined the impacts of the state earned income tax credit, estimating that if both the minimum wage and the EITC were increased by 10 percent across states, the US may see 1,230 fewer suicides per year. A 2020 study corroborated those results, finding that a \$1 increase in the minimum wage may reduce suicides by between 3.4 and 5.9 percent for less-educated adults.^T Another 2019 study, excluded from the evidence review because of a study design that did not allow for causal inference, revealed a 1.9 percent decline in suicides for each \$1 increase in the minimum wage.²³ Finally, a 2020 study found statistically insignificant, though beneficial, effects of a higher minimum wage on the proportion of adults who reported themselves to be in serious psychological distress (a 6 percent decrease).^U

Nurturing and Responsive Child Care in Safe Settings

The interaction between higher state and local minimum wages and the child care sector has garnered discussion of possible negative impacts on the supply and affordability of care.²⁷ No causal studies on this topic were identified for inclusion in this review, but a recent descriptive study examined the responses of Seattle child care providers to the city's gradual minimum wage increase from \$9.47 to \$15 (\$16.39 for large employers) between 2014 and 2021.¹³ The study's survey of 41 child care centers found that by 2017, 90 percent of the centers had raised prices to account for the increased minimum wage, and the second most common response was to reduce hours or staff. More rigorous research on child care provider responses to higher minimum wages would be valuable to the prenatal-to-3 field.

Optimal Child Health and Development

Researchers at the University of Iowa College of Public Health began an ongoing project in 2019 to examine the links between the minimum wage and long-term child health and development.²⁴ A 2020 study published as part of this project found that a \$1 increase in the minimum wage during pregnancy had a null effect on children's health, but a \$1 increase from birth through age 5 had a significant positive impact on the likelihood that a child was reported to be in excellent or very good health from ages 6 through 12 (an 8.7 percent increase).^R A \$1 increase through age 5 also significantly reduced the likelihood that children would miss school from ages 6 through 12 because of illness or injury (a 15.6 percent reduction in missed school days). A 2019 study using survey data from 2000 to 2015 found no overall significant effects of higher minimum wages on the health outcomes of children (including those with immigrant parents) in the US as reported by their parents (such as health rating on a scale of poor, fair, very good, or excellent).^Z

A 2017 study revealed that higher state minimum wages led to reduced child maltreatment rates; in particular, the authors found a 9.6 percent reduction in neglect reports with each \$1 increase in the minimum wage (a 10.8 percent reduction for children ages 0 to 5).^L Effects were not significant for physical abuse, but trended in the beneficial direction (a reduction of 15 reports per 100,000 children for each \$1 increase). This finding is consistent with prior research on the link between poverty and child neglect reports,²⁵ and it suggests that higher minimum wages may be an effective tool for improving child welfare by improving parents' ability to meet their children's material needs.²⁶

Is There Evidence That a Higher State Minimum Wage Reduces Disparities?^{vi}

Large gaps in wages, annual income, and wealth persist between White and Black workers; a 2019 report stated that White workers earn, on average, 25 percent more in annual income than Black workers.^{28,vii} Overall, women, Black workers,

^{vi} Disparities are defined here as differential outcomes by race, ethnicity, or socioeconomic status (SES).

^{vii} This study did not examine Hispanic or Latinx workers.

and Latinx^{viii} workers are disproportionately represented among those who earn less than \$15 per hour, and wage disparities can contribute to income and wealth disparities.⁸ Seven of the 10 states with the highest percentages of Black residents maintain the \$7.25 minimum wage, and White families' median net wealth is estimated at 10 times that of Black and Latinx families.⁸

Many of the studies analyzing the impacts of state minimum wage increases revealed differential impacts by race, gender, and education level. For example, a 2019 study found that state minimum wage increases reduced poverty to a greater degree for Black and Latinx^{ix} individuals and for workers with less education.^E A 2011 examination of the interaction between the earned income tax credit and higher minimum wages also found that earnings effects were strongest for Black and Hispanic women with lower education levels.^K Research suggests that local minimum wage increases in San Jose and Los Angeles will significantly benefit Hispanic workers, who will account for 53 percent and 80 percent, respectively, of affected workers in those cities once the increases are fully phased in.²⁹

A 2019 study that was not included in the evidence review because of limitations to causality found that higher state minimum wages significantly reduced infant mortality among infants born to Black mothers (a 20 percent reduction among states at or above the 75th percentile of state minimum wage levels).³⁰ The overall rate of infant mortality in this group has been found to be more than twice that of infants born to non-Hispanic White mothers.^{30,31} Further causal research on this link would be valuable to corroborate these results and reduce Black infant mortality.

A 2020 study also excluded from the evidence review examined the impacts of higher *sub-minimum* wages for tipped employees, who in many states earn just \$2.13 before tips.³² The study focused on poverty-related stress in pregnant women and found that a higher sub-minimum wage, set to the federal minimum wage level (\$7.25), may reduce antenatal stress by 19.7 percent among women of color with less than a college degree. More research on the effects of higher sub-minimum wages would broaden the evidence base for marginalized populations—according to the study, young women of color disproportionately receive sub-minimum wages.³²

Two additional studies excluded from the evidence review because they were less connected to the prenatal-to-3 policy goals nevertheless provided insight into how higher minimum wages may affect marginalized populations, including immigrants and individuals involved in the criminal justice system, many of whom are parents.^{33,34,37} A 2019 study found that higher minimum wages can reduce the incarceration rate in the US³³—the country with the highest current rate.³⁵ In particular, a \$1 increase in the state minimum wage was associated with 12 to 25 fewer incarcerations per 100,000 people, primarily driven by reductions in the jailing of men of color. The US currently incarcerates 698 people per 100,000, so the results represent up to a 3.6 percent reduction.³⁶ A 2019 study examining the impacts of higher state minimum wages on immigrants with no high school degree (including both documented and undocumented workers) found null effects on poverty and negative effects on employment: a 10 percent increase in the minimum wage was associated with a 1.1 percent decline in employment among immigrants from Mexico.³⁷ However, it is difficult to disentangle the effects of state minimum wages from ongoing changes in immigration policies that may affect where and how immigrants can safely seek employment.³⁷ This is another area that warrants further research.

Has the Return on Investment for State Minimum Wages Been Studied?

Two strong causal studies found that higher minimum wages boosted earned income and reduced the amount of public assistance families received.^{E,Y} In addition, a policy brief by the Economic Policy Institute estimated that for the lowest-income workers,^x a \$1 increase in hourly wages would reduce the likelihood of receiving public assistance by 3.1 percentage points (a reduction of 850,000 individuals).³⁸ A study estimating the effects of a federal minimum wage increase from \$7.25 to \$9.80 (which would, by default, raise the state minimum wage for those states that use the federal floor) predicted an increase in Gross Domestic Product of \$25 billion and a net increase in jobs of 100,000 over 2 years following implementation.⁹ A more comprehensive analysis of the return on investment is forthcoming.

^{viii} The referenced report used “Latino” rather than Hispanic, suggesting that the analysis may have included individuals from Latin American countries whose primary language is not Spanish (e.g., Brazil).

^{ix} See previous footnote for this study as well.

^x This analysis examined individuals earning up to \$12.16 per hour.

What Do We Know, and What Do We Not Know?

The evidence indicates that state minimum wage increases boost earnings and family incomes with minimal or no adverse effects on employment, leaving families better off overall. Studies show that minimum wage increases can reduce poverty rates, with the most significant effects in areas with the lowest median wages and for subgroups including children, Black, Hispanic, and Latinx individuals, and people of lower educational attainment. The evidence also suggests that higher minimum wages can lead to modest improvements in birth outcomes, including reduced infant mortality and low birthweight, and can lead to lower child neglect rates.

Much less is known about how minimum wages may affect child health past the infant period and how large minimum wage increases will affect the child care market, given that many child care workers earn wages below the highest proposed levels.³⁹ Most of the studies on child and family outcomes that find positive results have examined minimum wages up to the \$10 level, but at least seven states will have reached minimum wages of \$15 by 2025. Additional research will be necessary to examine whether minimum wages at the highest levels produce more negative employment impacts than relatively modest increases. Evidence from a 2018 study of Seattle revealed that the city's minimum wage increase from \$9.47 to \$11 produced better outcomes than the subsequent move from \$11 to \$13, but more nationally representative studies are needed to determine the optimal wage level for supporting families and producing positive outcomes.¹ Beyond simulations and estimates, more empirical research on large minimum wage increases, as more states implement them, will be valuable for determining the optimal state minimum wage.

Analyses that account for changes in the real value of the minimum wage (adjusting for inflation), rather than just the nominal value, will also be important. For example, the real value of the \$7.25 federal minimum wage has eroded over time and is now worth 17 percent less than in 2009 when it was first set at that level.⁴¹ More research examining the differential impacts of minimum wage increases by race and ethnicity, particularly for birth outcomes, would add to the growing evidence base. Finally, evidence on how higher minimum wages affect fathers and noncustodial parents, such as through greater child support payment cooperation, would be valuable for the prenatal-to-3 field.

Is a Higher State Minimum Wage an Effective Policy for Improving Prenatal-to-3 Outcomes?

Evidence shows that state minimum wage increases, especially those extending to \$10 per hour or above, are effective for increasing household resources, improving birth outcomes, and reducing child poverty, particularly in families of color. Higher minimum wages can also improve parent mental health and reduce adult mortality. Studies of local minimum wages as high as \$12 to \$15 have shown some positive results, but more causal research is needed at the statewide level for wages in that range.

How Do State Minimum Wages Vary Across the States?

States vary in the level of the minimum wage in current legislation, as well as how they set their minimum wage. For example, seven states set their minimum wages at \$7.25 by statute (Idaho, Iowa, Kansas, Kentucky, North Dakota, Pennsylvania, and Wisconsin), whereas six other states set their minimum wages by reference to the federal minimum wage in the Fair Labor Standards Act (Indiana, New Hampshire, Oklahoma, Texas, Utah, and Virginia). Five states have no state minimum wage defined in their legislation at all (Alabama, Louisiana, Mississippi, South Carolina, and Tennessee), and three have set their state minimum wage at a level lower than the federal minimum wage (Georgia, North Carolina, and Wyoming), which means that employers in those states are bound to the federal minimum wage by default. See Table 3 below for state variation in the minimum wage level, with additional nuances by state. A total of 19 states currently have a minimum wage of at least \$10 or will by October 1, 2020.

State minimum wages range from \$7.25 to \$15, and seven states have approved gradual increases to \$15 that will become effective between July 1, 2020 and 2025.⁴ Cities including Chicago, San Francisco, Oakland, San Jose, New York City, and Seattle have implemented local minimum wages that exceed the current state levels or that are being implemented on a faster phase-in schedule than approved state increases.⁴ For example, large employers in Seattle (those with over 500 workers) are required to pay at least \$16.39 per hour in 2020, whereas the state of Washington

implemented a minimum wage increase to \$13.50 from \$12 in 2020.¹⁴ In contrast, nine states currently prohibit cities from enacting their own minimum wage laws (Alabama, Georgia, Idaho, Iowa, Louisiana, North Dakota, Oklahoma, Tennessee, and Texas).¹⁵ States also vary in the minimum wages set for tipped workers and individuals with disabilities, who are sometimes exempted from the prevailing minimum wage.^{16,17}

Table 3: State Variation in the State Minimum Wage

State has adopted and fully implemented a minimum wage of \$10 or greater				
	Policy Adoption	Generosity and Variation		
State	Yes/No	Current State Minimum Wage	Cost-of-Living Adjusted Minimum Wage	Value of Nominal Minimum Wage Necessary for a \$10 Cost-of-Living Adjusted Minimum Wage
Alabama	No	\$7.25**	\$8.39	\$8.64
Alaska	Yes	\$10.19	\$9.72	\$10.48
Arizona	Yes	\$12.00	\$12.44	\$9.65
Arkansas	Yes	\$10.00	\$11.72	\$8.53
California	Yes	\$13.00	\$11.27	\$11.54
Colorado	Yes	\$12.00	\$11.78	\$10.19
Connecticut	Yes	\$12.00	\$11.31	\$10.61
Delaware	No*	\$9.25	\$9.36	\$9.88
District of Columbia	Yes	\$15.00	\$12.92	\$11.61
Florida	No*	\$8.56	\$8.51	\$10.06
Georgia	No	\$7.25**	\$7.80	\$9.30
Hawaii	Yes	\$10.10	\$8.55	\$11.81
Idaho	No	\$7.25	\$7.84	\$9.25
Illinois	Yes	\$10.00	\$10.19	\$9.81
Indiana	No	\$7.25	\$8.12	\$8.93
Iowa	No	\$7.25	\$8.13	\$8.92
Kansas	No	\$7.25	\$8.06	\$9.00
Kentucky	No	\$7.25	\$8.26	\$8.78
Louisiana	No	\$7.25**	\$8.14	\$8.91
Maine	Yes	\$12.00	\$12.00	\$10.00
Maryland	Yes	\$11.00	\$10.15	\$10.84
Massachusetts	Yes	\$12.75	\$11.62	\$10.97
Michigan	No*	\$9.65	\$10.44	\$9.24
Minnesota	Yes	\$10.00	\$10.26	\$9.75
Mississippi	No	\$7.25**	\$8.43	\$8.60
Missouri	No*	\$9.45	\$10.64	\$8.88
Montana	No*	\$8.65	\$9.27	\$9.33
Nebraska	No*	\$9.00	\$10.06	\$8.95
Nevada	No*	\$9.00	\$9.23	\$9.75
New Hampshire	No	\$7.25	\$6.84	\$10.60
New Jersey	Yes	\$11.00	\$9.55	\$11.52
New Mexico	No*	\$9.00	\$9.88	\$9.11

Table 3: State Variation in the State Minimum Wage (continued)

State has adopted and fully implemented a minimum wage of \$10 or greater				
	Policy Adoption	Generosity and Variation		
State	Yes/No	Current State Minimum Wage	Cost-of-Living Adjusted Minimum Wage	Value of Nominal Minimum Wage Necessary for a \$10 Cost-of-Living Adjusted Minimum Wage
New York	Yes	\$11.80	\$10.14	\$11.64
North Carolina	No	\$7.25**	\$7.90	\$9.18
North Dakota	No	\$7.25	\$8.00	\$9.06
Ohio	No*	\$8.70	\$9.84	\$8.84
Oklahoma	No	\$7.25	\$8.20	\$8.84
Oregon	Yes	\$12.00	\$11.87	\$10.11
Pennsylvania	No	\$7.25	\$7.44	\$9.75
Rhode Island	Yes	\$10.50	\$10.57	\$9.93
South Carolina	No	\$7.25**	\$7.96	\$9.11
South Dakota	No*	\$9.30	\$10.58	\$8.79
Tennessee	No	\$7.25**	\$8.06	\$8.99
Texas	No	\$7.25	\$7.49	\$9.68
Utah	No	\$7.25	\$7.51	\$9.66
Vermont	Yes	\$10.96	\$10.64	\$10.30
Virginia	No	\$7.25	\$7.11	\$10.20
Washington	Yes	\$13.50	\$12.52	\$10.78
West Virginia	No*	\$8.75	\$9.97	\$8.78
Wisconsin	No	\$7.25	\$7.89	\$9.19
Wyoming	No	\$7.25**	\$7.82	\$9.27
Best State	N/A	\$15.00	\$12.92	N/A
Worst State	N/A	\$7.25	\$6.84	N/A
Median State	N/A	\$9.00	\$9.36	N/A
State Count	19	N/A	N/A	N/A

"No*" denotes a state minimum wage higher than the federal minimum but less than \$10 an hour.

"**" in the Current State Minimum Wage column indicates no state minimum wage legislated or it is set lower than the federal minimum wage of \$7.25 from the Fair Labor Standards Act. The FLSA applies for covered workers in these states.

Policy adoption status data: As of October 1, 2020. State labor statutes and United States Department of Labor. Current state minimum wage data: As of October 1, 2020. State labor statutes and United States Department of Labor.

Cost-of-living adjusted minimum wage data: As of May 18, 2020. Bureau of Economic Analysis.

For additional source and calculation information, please refer to the Methods and Sources section of pn3policy.org.

How Did We Reach Our Conclusions?

Method of Review

This evidence review began with a broad search of all literature related to the policy and its impacts on child and family wellbeing during the prenatal-to-3 period. First, we identified and collected relevant peer-reviewed academic studies as well as research briefs, government reports, and working papers, using predefined search parameters, keywords, and trusted search engines. From this large body of work, we then singled out for more careful review those studies that endeavored to identify causal links between the policy and our outcomes of interest, taking into consideration characteristics such as the research designs put in place, the analytic methods used, and the relevance of the populations and outcomes studied. We then subjected this literature to an in-depth critique and chose only the most methodologically rigorous research to inform our conclusions about policy effectiveness. All studies considered to date for this review were released on or before March 31, 2020.

Standards of Strong Causal Evidence

When conducting a policy review, we consider only the strongest studies to be part of the evidence base for accurately assessing policy effectiveness. A strong study has a sufficiently large, representative sample, has been subjected to methodologically rigorous analyses, and has a well-executed research design allowing for causal inference—in other words, it demonstrates that changes in the outcome of interest were likely caused by the policy being studied.

The study design considered most reliable for establishing causality is a randomized control trial (RCT), an approach in which an intervention is applied to a randomly assigned subset of people. This approach is rare in policy evaluation because policies typically affect entire populations; application of a policy only to a subset of people is ethically and logistically prohibitive under most circumstances. However, when available, randomized control trials are an integral part of a policy's evidence base and an invaluable resource for understanding policy effectiveness.

The strongest designs typically used for studying policy impacts are quasi-experimental designs (QEDs) and longitudinal studies with adequate controls for internal validity (for example, using statistical methods to ensure that the policy, rather than some other variable, is the most likely cause of any changes in the outcomes of interest). Our conclusions are informed largely by these types of studies, which employ sophisticated techniques to identify causal relationships between policies and outcomes. Rigorous meta-analyses with sufficient numbers of studies, when available, also inform our conclusions.

Studies That Meet Standards of Strong Causal Evidence

- A. Allegretto, S., Godøy, A., Nadler, C., & Reich, N. (2018). *The new wave of local minimum wage policies: Evidence from six cities*. Center on Wage and Employment Dynamics, University of California, Berkeley. <https://irle.berkeley.edu/files/2018/09/The-New-Wave-of-Local-Minimum-Wage-Policies.pdf>
- B. Bullinger, L. (2017). The effect of minimum wages on adolescent fertility: A nationwide analysis. *American Journal of Public Health*, 107(3), 447–452. <https://doi.org/10.2105/AJPH.2016.303604>
- C. Card, D. & Krueger, A. (1994). Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania. *American Economic Review*, 84(4), 772–793. <https://www.jstor.org/stable/2677856>
- D. Cengiz, D., Dube, A., Lindner, A., & Zipperer, B. (2019). *The effect of minimum wages on low-wage jobs: Evidence from the United States using a bunching estimator* (No. w25434). National Bureau of Economic Research. <https://www.nber.org/papers/w25434>
- E. Dube, A. (2019). Minimum wages and the distribution of family incomes. *American Economic Journal*, 11(4), 268–304. <https://doi.org/10.1257/app.20170085>
- F. Dube, A., Lester, W., & Reich, M. (2010). Minimum wage effects across state borders: Estimates using contiguous counties. *The Review of Economics and Statistics*, 92(4), 945–964. <https://www.jstor.org/stable/40985804>
- G. Godøy, A., & Reich, M. (July 2019). *Minimum wage effects in low-wage areas*. Institute for Research on Labor and Employment, University of California, Berkeley. <https://irle.berkeley.edu/minimum-wage-effects-in-low-wage-areas/>
- H. Jalali, A. (2018). *The minimum wage and infant mortality*. University of Utah, Department of Economics. <https://dx.doi.org/10.2139/ssrn.3308213>
- I. Jardim, E., Long, M., Plotnick, R., van Wegen, E., Vigdor, J., & Wething, H. (2018). *Minimum wage increases, wages, and low-wage employment: Evidence from Seattle* (No. 23532). National Bureau of Economic Research. <https://www.nber.org/papers/w23532>

- J. Komro, K., Livingston, M., Markowitz, S., & Wagenaar, A. (2016). The effect of an increased minimum wage on infant mortality and birth weight. *American Journal of Public Health*, 106(8), 1514–1516. <https://doi.org/10.2105/AJPH.2016.303268>
- K. Neumark, D., & Wascher, W. (2011). Does a higher minimum wage enhance the effectiveness of the earned income tax credit? *Industrial and Labor Relations Review*, 64(4), 712–746. <https://doi.org/10.1177%2F001979391106400405>
- L. Raissian, K.M., & Bullinger, L.R. (2017). Money matters: Does the minimum wage affect child maltreatment rates? *Children and Youth Services Review*, 72, 60–70. <https://doi.org/10.1016/j.childyouth.2016.09.033>
- M. Reich, M., Montaloux, C., Allegretto, S., Jacobs, K., Bernhardt, A., & Thomason, S. (2016). *The effects of a \$15 minimum wage by 2019 in San Jose and Santa Clara County*. Center on Wage and Employment Dynamics, University of California, Berkeley. <https://www.cupertino.org/home/showdocument?id=11886>
- N. Agarwal, S., Ambrose, B., & Diop, M. (2019). *Do minimum wage increases benefit intended households? Evidence from the performance of residential leases*. University of Southern California, Pennsylvania State University, and National University of Singapore. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3283913
- O. Sabia, J. & Nielsen, R. (2015). Minimum wages, poverty, and material hardship: New evidence from the SIPP. *Review of Economics of the Household*, 13(1), 95–134. <https://doi.org/10.1007/s11150-012-9171-8>
- P. Tsao, T., Konty, K., Van Wye, G., Barbot, O., Hadler, J., Linos, N., & Bassett, M. (2016). Estimating potential reductions in premature mortality in New York City from raising the minimum wage to \$15. *American Journal of Public Health*, 106(6), 1036–1041. <https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2016.303188>
- Q. Wehby, G., Dave, D., & Kaestner, R. (2018). *Effects of the minimum wage on infant health* (No. w22373). National Bureau of Economic Research. <https://www.nber.org/papers/w22373>
- R. Wehby, G., Kaestner, R., Lyu, W., & Dave, D. (2020). *Effects of the minimum wage on child health* (No. w26691). National Bureau of Economic Research. <https://www.nber.org/papers/w26691.pdf>
- S. Dow, W., Godøy, A., Lowenstein, C., & Reich, M. (2019). *Can economic policies reduce deaths of despair?* (No. w25787). National Bureau of Economic Research. <https://www.nber.org/papers/w25787>
- T. Kaufman, J., Salas-Hernandez, L., Komro, K., & Livingston, M. (2020). Effects of increased minimum wages by unemployment rate on suicide in the U.S.A. *Journal of Epidemiology and Community Health*, 74(3), 1–6. <http://dx.doi.org/10.1136/jech-2019-212981>
- U. Buszkiewicz, J., Hill, H., & Otten, J. (2020). State minimum wage rates and health in working-age adults using the National Health Interview Survey. *American Journal of Epidemiology*. <https://doi.org/10.1093/aje/kwaa018>
- V. Yonezawa, K., Gomez, M., & McLaughlin, E. (2020). *Impacts of minimum wage increases in the US retail sector: Full-time versus part-time employment*. Cornell University. <https://dx.doi.org/10.2139/ssrn.3520915>
- W. Cooper, D., Luengo-Prado, M., & Parker, J. (2019). The local aggregate effects of minimum wage increases. *Journal of Money, Credit, and Banking*, 52(1), 5–35. <https://doi.org/10.1111/jmcb.12684>
- X. Wang, W., Phillips, P., & Su, L. (2019). The heterogeneous effects of the minimum wage on employment across states. *Economics Letters*, 174, 179–185. <https://doi.org/10.1016/j.econlet.2018.11.002>
- Y. Godøy, A., Reich, M., & Allegretto, S. (2019). *Parental labor supply: Evidence from minimum wage changes*. University of California, Berkeley, Institute for Research on Labor and Employment. <https://irle.berkeley.edu/parental-labor-supply-evidence-from-minimum-wage-changes/>
- Z. Averett, S., Smith, J., & Wang, Y. (Sept. 2019). *Minimum wages and the health and access to care of immigrants' children*. Institute of Labor Economics, Discussion Paper Series. <http://ftp.iza.org/dp12606.pdf>
- AA. DeFina, R. (2008). The impact of state minimum wages on child poverty in female-headed families. *Journal of Poverty*, 12(2), 155–174. <https://doi.org/10.1080/10875540801973542>
- BB. Ibragimov, U., Beane, S., Friedman, S., Komro, K., Edwards, J., Williams, L., Livingston, M., Stall, R., Wingood, G., & Cooper, H. (2019). States with higher minimum wages have lower STI rates among women: Results of an ecological study of 66 US metropolitan areas, 2003–2015. *PLoS One*, 14(10), 1–18. <https://doi.org/10.1371/journal.pone.0223579>

Other References

1. Shonkoff, J., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/9824>
2. United States House Committee on Education and Labor. (2019). *Raise the wage fact sheet*. <https://edlabor.house.gov/imo/media/doc/RAISE%20THE%20WAGE%20ACT%20-%20Fact%20Sheet.pdf>
3. Economic Policy Institute. (2019, Feb. 5). *Why America needs a \$15 minimum wage*. <https://www.epi.org/publication/why-america-needs-a-15-minimum-wage/>
4. National Conference of State Legislatures. (2020). *State minimum wages: 2020 minimum wage by state*. <http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>
5. US Bureau of Labor Statistics. (2018). *Characteristics of minimum wage workers, 2017*. <https://www.bls.gov/opub/reports/minimum-wage/2017/home.htm>

6. Zipperer, B. (2018, June 13). *The erosion of the federal minimum wage has increased poverty, especially for black and Hispanic families*. Economic Policy Institute. <https://www.epi.org/publication/the-erosion-of-the-federal-minimum-wage-has-increased-poverty-especially-for-black-and-hispanic-families/>
7. Cooper, D. (2019, Feb. 5). *Raising the federal minimum wage to \$15 by 2024 would lift pay for nearly 40 million workers*. Economic Policy Institute. <https://www.epi.org/publication/raising-the-federal-minimum-wage-to-15-by-2024-would-lift-pay-for-nearly-40-million-workers/>
8. Huizar, L. & Gebreselassie, T. (2016). *What a \$15 minimum wage means for women and workers of color*. National Employment Law Project. <https://s27147.pcdn.co/wp-content/uploads/Policy-Brief-15-Minimum-Wage-Women-Workers-of-Color.pdf>
9. Cooper, D. & Hall, D. (2012). *How raising the federal minimum wage would help working families and give the economy a boost*. Economic Policy Institute. <https://www.epi.org/publication/ib341-raising-federal-minimum-wage/>
10. Hill, H. & Romich, J. (2018). How will higher minimum wages affect family life and children's well-being? *Child Development Perspectives*, 12(2), 109–114. <https://doi.org/10.1111/cdep.12270>
11. Neumark, D. (2018). *Employment effects of minimum wages*. World of Labor. <https://wol.iza.org/articles/employment-effects-of-minimum-wages/long>
12. Duke, B. (2016, Sept. 2). *To raise productivity, let's raise wages*. Center for American Progress. <https://cdn.americanprogress.org/wp-content/uploads/2016/09/01103126/BoostingProductivity-brief0902.pdf>
13. Otten, J., Getts, K., Althausen, A., Buszkiewicz, J., Jardim E., Hill, H., Romich, J., & Allard, S. (2018). *Responding to an increased minimum wage: A mixed methods study of child care business during the implementation of Seattle's minimum wage ordinance*. *Social Work and Society*, 16(1), 1–22. <https://www.socwork.net/sws/article/view/538>
14. Seattle Office of Labor Standards. (2019). *Minimum wage ordinance*. <http://www.seattle.gov/laborstandards/ordinances/minimum-wage>
15. 2 Tex. Lab. Code §62.001 (1993). <https://statutes.capitol.texas.gov/Docs/LA/htm/LA.62.htm>
16. Cesario, L. (2019). *States weigh options on subminimum wages for workers with disabilities*. The NCSL Blog. National Conference of State Legislatures. <https://www.ncsl.org/blog/2019/08/28/states-weigh-options-on-subminimum-wages-for-workers-with-disabilities.aspx>
17. US Dept. of Labor (2020). *Minimum wages for tipped employees*. <https://www.dol.gov/agencies/whd/state/minimum-wage/tipped>
18. Hutton, A. (2019, Dec. 13). *Silicon valley's minimum wage workers will see bigger paychecks in 2020*. San José Spotlight. <https://sanjosespotlight.com/silicon-valleys-minimum-wage-workers-will-see-bigger-paychecks-in-2020/>
19. Schmitt, J. (2013). *Why does the minimum wage have no discernible effect on employment?* Center for Economic and Policy Research. <http://cepr.net/documents/publications/min-wage-2013-02.pdf>
20. Woolf, S., Aron, L., Dubay, L., Simon, S., Zimmerman, E., & Luk, K. (April 2015). *How are income and wealth linked to health and longevity?* Urban Institute. <https://www.urban.org/sites/default/files/publication/49116/2000178-How-are-Income-and-Wealth-Linked-to-Health-and-Longevity.pdf>
21. American Academy of Pediatrics, Council on Community Pediatrics. (2016). Poverty and child health in the United States. *Pediatrics*, 137(4), 1–14. <https://doi.org/10.1542/peds.2016-0339>
22. New York State Department of Labor. (n.d.). Minimum wage. <https://www.labor.ny.gov/workerprotection/laborstandards/workprot/minwage.shtm>
23. Gertner, A., Rotter, J., & Shafer, P. (2019). Association between state minimum wages and suicide rates in the US. *American Journal of Preventive Medicine*, 56(5), 648–654. <https://doi.org/10.1016/j.amepre.2018.12.008>
24. University of Iowa College of Public Health. (2019, Jan. 29). *Wehby to study effects of minimum wage on long-term child health and development*. <https://www.public-health.uiowa.edu/news-items/wehby-to-study-effects-of-minimum-wage-on-long-term-child-health-and-development/>
25. Dale, M. (2014). *Addressing the underlying issue of poverty in child-neglect cases*. American Bar Association. <https://www.americanbar.org/groups/litigation/committees/childrens-rights/articles/2014/addressing-underlying-issue-poverty-child-neglect-cases/>
26. Shook Slack, K., Holl, J., McDaniel, M., Yoo, J., & Bolger, K. (2004). Understanding the risks of child neglect: An exploration of poverty and parenting characteristics. *Child Maltreatment*, 9(4), 395–408. <https://doi.org/10.1177%2F1077559504269193>
27. Fernandes, D. (2015, May 22). *Minimum wage increase will lead to less child care, centers say*. Southern California Public Radio (SCPR). <https://www.scpr.org/news/2015/05/22/51864/minimum-wage-increase-will-lead-to-less-child-care/>
28. Derenoncourt, E., & Montialoux, C. (2019). *Minimum wages and racial inequality*. Princeton University and the University of California, Berkeley. <http://www.clairemontialoux.com/files/DM2019.pdf>
29. Marotta, J., & Greene, S. (2019). *Minimum wages: What does the research tell us about the effectiveness of local action?* Urban Institute. https://www.urban.org/sites/default/files/publication/99645/minimum_wages._what_does_the_research_tell_us_about_the_effectiveness_of_local_action_0.pdf
30. Rosenquist, N., Cook, D., Ehntholt, A., Omaye, A., Muennig, P., & Pabayo, R. (2019). Differential relationship between state-level minimum wage and infant mortality risk among US infants born to white and black mothers. *Journal of Epidemiology and Community Health*, 74(1), 14–19. <http://dx.doi.org/10.1136/jech-2019-212987>

31. US Department of Health and Human Services, Office of Minority Health. (2017). *Infant mortality and African Americans*. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=23>
32. Andrea, S.B., Messer, L.C., Marino, M., Goodman, J.M., & Boone-Heinonen, J. (2020). The tipping point: Could increasing the subminimum wage reduce poverty-related antenatal stressors in US women? *Annals of Epidemiology*, 45, 47-53. <https://doi.org/10.1016/j.annepidem.2020.03.007>
33. Ghosh, P., Hoover, G., & Liu, Z. (2020). Do state minimum wages affect the incarceration rate? *Southern Economic Journal*, 86(3), 845-872. <https://doi.org/10.1002/soej.12400>
34. Bureau of Justice Statistics Special Report. (2010). *Parents in prison and their minor children*. <https://www.bjs.gov/content/pub/pdf/pptmc.pdf>
35. Equal Justice Initiative. (2019, April 26). *United States still has the highest incarceration rate in the world*. <https://eji.org/news/united-states-still-has-highest-incarceration-rate-world/>
36. Prison Policy Initiative. (2020, Jan. 16). *What percent of the US is incarcerated?* <https://www.prisonpolicy.org/blog/2020/01/16/percent-incarcerated/>
37. Churchill, B., & Sabia, J. (2019). The effects of minimum wages on low-skilled immigrants' wages, employment, and poverty. *Industrial Relations*, 58(2), 275-314. <https://doi.org/10.1111/irel.12232>
38. Cooper, D. (2016). *Balancing paychecks and public assistance: How higher wages could strengthen what government can do*. Economic Policy Institute. <https://www.epi.org/files/2015/balancing-paychecks-and-public-assistance.pdf>
39. US Bureau of Labor Statistics. (Sept. 19, 2019). *Occupational outlook handbook: Childcare workers*. <https://www.bls.gov/ooh/personal-care-and-service/childcare-workers.htm>
40. Soule, G. (1957). The economics of leisure. *The ANNALS of the American Academy of Political and Social Science*. <https://doi.org/10.1177%2F000271625731300106>
41. Cooper, D., Gould, E., & Zipperer, B. (2019). *Low-wage workers are suffering from a decline in the real value of the federal minimum wage*. <https://www.epi.org/publication/labor-day-2019-minimum-wage/>
42. Hsin, A., & Felfe, C. (2014). When does time matter? Maternal employment, children's time with parents, and child development. *Demography*, 51(5), 1867-1894. <https://dx.doi.org/10.1007%2Fs13524-014-0334-5>
43. Donoghue, E. & Council on Early Childhood. (2017). Quality early education and child care from birth to Kindergarten. *Pediatrics*, 140(2), 1-6. <https://doi.org/10.1542/peds.2017-1488>
44. United States Congressional Budget Office (CBO). (2019). *The effects on employment and family income of increasing the federal minimum wage*. <https://www.cbo.gov/system/files/2019-07/CBO-55410-MinimumWage2019.pdf>



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