

## Paid Family Leave

### Evidence Review Findings: Effective / Roadmap Policy









A state policy providing at least 6 weeks of paid family leave to parents with a new biological, adopted, or foster child increases the likelihood and length of leave-taking for mothers, reduces racial disparities in leave-taking, and has beneficial effects on maternal labor force attachment, parent and child health, and nurturing and responsive parenting.

Paid family leave policies require employers to allow eligible parents to take time off from work to bond with a new child while receiving a portion of their salary. By providing parents with the time and financial security to stay home with a new child, paid family leave may improve both economic security and the health and wellbeing of children and parents. Currently, 12 states, including the District of Columbia, have enacted statewide paid family leave policies of any length. Only seven states have begun implementing a paid family leave policy of at least 6 weeks as of October 1, 2022.

States vary in the number of weeks offered, the portion of wages paid, eligibility requirements, job protection provisions, and the funding mechanism. States also vary in whether they provide leave to employees in the private sector, the public sector, or both. Studies that examine the causal impact of paid family leave policies find that providing at least 6 weeks of paid leave to parents with a new child increases the length and likelihood of leave-taking, increases mothers' labor force participation, improves mothers' mental health, and fosters better child-parent relationships and child health.

Decades of research in the field of child development have made clear the conditions necessary for young children and their families to thrive.<sup>1</sup> These conditions are represented by our eight policy goals, shown in Table 1. The goals positively impacted by paid family leave are indicated with a filled circle, and the goals theoretically aligned (but without evidence of effectiveness from strong causal studies) are indicated with an unfilled circle.

Table 1: Impacts of Paid Family Leave on Policy Goals

Positive Impact	Policy Goal	Overall Findings
	Access to Needed Services	Positive impacts on leave-taking
	Parents' Ability to Work	Mostly positive impacts on employment and labor force participation
	Sufficient Household Resources	Mixed impacts, but leaning positive for household income and poverty
	Healthy and Equitable Births	Trending null impacts on birth outcomes
	Parental Health and Emotional Wellbeing	Positive impacts on adult physical and mental health
	Nurturing and Responsive Child-Parent Relationships	Mixed impacts on quality time spent together
	Nurturing and Responsive Child Care in Safe Settings	No strong causal studies identified for this goal
	Optimal Child Health and Development	Positive impacts on a variety of child health indicators

## What Is Paid Family Leave?

The Family and Medical Leave Act (FMLA), enacted in 1993, is currently the primary federal policy to support parental and family leave in the United States. The FMLA mandates that qualifying workers receive 12 weeks of unpaid, job-protected leave with continuous health insurance coverage.<sup>45</sup> However, firm size and work history requirements preclude some employees from taking time off through the FMLA. To qualify, employees must have worked at least 1,250 hours in the preceding year, must work in a firm with at least 50 employees, and must have worked for that employer for the past 12 months.<sup>2</sup>

Data show that only 56 percent of workers qualify for the FMLA.<sup>3</sup> Research has also found that the policy largely benefits higher-income and White workers.<sup>4,35</sup> Because the FMLA provides only unpaid leave to eligible workers, many parents who earn low incomes may not use the time off or may shorten the duration of leave so that they do not lose wages. As of October 1, 2020, federal employees are eligible for 12 weeks of paid leave to care for a new child through the Federal Employee Paid Leave Act (FEPLA) in addition to FMLA.<sup>5</sup>

Given the limitations of the FMLA, several states have adopted statewide paid family leave policies. Paid family leave policies allow parents time to bond with a new biological, adopted, or foster child.

These policies often include medical leave provisions, allowing individuals to take time off for their own disabilities or to care for ill family members, but the focus of this review is on parental leave.

State paid family leave policies currently allow parents to take between 5 and 12 weeks off from work, depending on the state, with pay varying based on a proportion of the employee's wages prior to taking leave. Most state policies also have weekly payment caps and require that individuals have a minimum work history, either by time worked or earnings, in the state during a given "base period" (often 12 months) prior to leave-taking.

### ***Who Is Affected by Paid Family Leave?***

Paid family leave policies govern how much paid time off employers must provide to an employee after the birth, adoption, or placement of a foster child. According to the Bureau of Labor Statistics, as of March 2021, 23 percent of all workers had access to paid family leave, whereas 89 percent of workers had access to unpaid family leave.<sup>i,6</sup> A minority of states have adopted paid family leave policies, so for many workers, access to paid family leave is dependent on the generosity of employer-offered benefits. Employees that are born in the United States, are college educated, and are non-Hispanic White have access to paid family leave at higher rates.<sup>4,35</sup>

### ***What Are the Funding Options for Paid Family Leave?***

The majority of states that offer paid family leave fund it through employee payroll taxes, which requires all workers and employers to contribute to funding the costs. California, Connecticut, Massachusetts, New Jersey, New York, Rhode Island, and Washington use this funding mechanism, with an employee payroll tax that ranges from 0.4 percent in Rhode Island to 1.1 percent in Washington.<sup>ii,53</sup> The District of Columbia finances its program through employer contributions and Colorado funds its program through both employee and employer contributions. Delaware, Maryland, and Oregon will fund their programs using this same mechanism when implemented.

### **Why Should Paid Family Leave Be Expected to Impact the Prenatal-to-3 Period?**

Paid family leave is designed to allow parents time off from work to bond with a new child. The guarantee of paid family leave may increase parents' labor force participation and families' economic security after a birth.<sup>6</sup> Specifically, if parents are able to maintain employment and receive a portion of their salary when a new child enters the family, parents may be more likely to stay engaged in the workforce long-term, which is associated with indicators of greater economic security.<sup>8</sup> In particular, continued attachment to the pre-birth employer could reduce time spent looking for work and allow parents to build job-specific skills over time.

If parents with access to paid family leave remain attached to the workforce to a greater degree than families without paid leave, then affordable and high-quality child care must be accessible to support children's development when parents work.<sup>44</sup> Some scholars emphasize that paid family leave policies

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<sup>i</sup> The sum of paid and unpaid leave exceeds 100 percent because some workers had access to unpaid leave through the Family Medical Leave Act (FMLA), as well as paid family leave.

<sup>ii</sup> State-specific research conducted by the Prenatal-to-3 Policy Impact Center.

can incentivize women to invest in their own education and training to a greater degree, because women perceive work as more profitable and compatible with raising children.<sup>48</sup>

Additionally, paid family leave may positively impact parent and child health outcomes.<sup>10</sup> Paid family leave should help new parents have more time to bond with their babies, develop positive caregiving skills, and build the foundation for healthy attachment.<sup>11</sup> Children may be more likely to experience positive health outcomes if their families have access to paid family leave.<sup>12</sup> One mechanism may be through increased food security, because parents may have greater resources to spend on nutritious food.

Mothers who are able to take paid time off after the birth of a child may be more likely to initiate breastfeeding and continue breastfeeding longer.<sup>12</sup> Furthermore, both mothers and children may have a lower likelihood of being hospitalized following childbirth, because families may have more time to seek prompt medical care if a need arises.<sup>1</sup> Children may be less likely to experience avoidable poor health outcomes through timely immunizations and infant well-child visits.<sup>12</sup>

## What Impact Does Paid Family Leave Have, and for Whom?

The evidence for the impact of paid family leave in the United States reveals that the policy improves a variety of child and family outcomes, but the research is limited to a few states. Only California, New Jersey, and Rhode Island have family leave laws that were in effect before 2018, and the causal studies in this review examine only those three states. Other states with paid family leave programs have not implemented them for a sufficient period to study the impacts in a rigorous way. As a result, the majority of reviewed studies assess the efficacy of a paid family leave policy of 6 weeks, corresponding to the duration of California's paid family leave policy between 2004 and 2020.

Although most countries have implemented paid family leave and many international studies have found positive impacts, the effects of those laws must be considered within the broader context of universal child care, universal health care, and child allowances offered in many other advanced economies.<sup>43</sup> Due to these systemic policy differences, this review examines laws within the US to build evidence on the policy's effectiveness for families in this country.

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 displays the findings associated with paid family leave (beneficial, null,<sup>iii</sup> or detrimental) for each of the strong studies (A through DD) in the causal studies reference list. For each indicator, a study is categorized based on findings for the overall study population; subgroup findings are discussed in the narrative. The Evidence of Effectiveness table also includes our conclusions about the overall impact on each studied policy goal. The assessment of the overall

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<sup>iii</sup> An impact is considered statistically significant if  $p \leq 0.05$ . Results with p-values above this threshold are considered null or nonsignificant.

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.

Of the 30 causal studies included in this review, 6 examined how outcomes differed by race or ethnicity (beyond simply presenting summary statistics or controlling for race/ethnicity). Where available, this review presents the analyses’ causal findings for by race and ethnicity. A rigorous evaluation of a policy’s effectiveness should consider whether the policy has equitable impacts and should assess the extent to which a policy reduces or exacerbates pre-existing disparities in economic and social wellbeing.

Table 2: Evidence of Effectiveness for Paid Family Leave

Policy Goal	Indicator	Beneficial Impacts	Null Impacts	Detrimental Impacts	Overall Impact on Goal
Access to Needed Services	Leave-Taking	B, N, R, W			Positive
	Receipt of Postpartum Care	Z			
Parents’ Ability to Work	Labor Force Participation	D, F, Q	DD		Mostly Positive
	Weeks Worked	B			
	Average Weekly Work Hours	B, N			
	Employment	B, D, AA, CC	N, O, DD	A, F	
	Attachment to Pre-Birth Employer	B, O	A		
Sufficient Household Resources	Household Income	M	N		Mixed
	Annual Wage Earnings		DD	A	
	Hourly Wages		B		
	Household Savings		X		
	Risk of Poverty	M			
	Food Insecurity	Y			
	Reduced Reliance on Public Assistance	V			
Healthy and Equitable Births	Preterm Births		S		Trending* Null
	Low Birthweight		S		
	Postneonatal Mortality	S			

Parental Health and Emotional Wellbeing	Self-Rated Health	P			Positive
	Overweight	P			
	Obesity		P		
	Alcohol Consumption	P			
	Maternal Mental Health	C			
	Paternal Mental Health		C		
	Coping With Demands of Parenting	C			
	Psychological Distress	P, T, BB			
Nurturing and Responsive Child-Parent Relationships	Mothers' Time Spent With Children on Reading, Outings, Meals	A	C		Mixed
Optimal Child Health and Development	Breastfeeding	G, H, K, U			Positive
	Infant Hospitalizations	L			
	Timely Infant Vaccinations	E			
	Infant Health	C			
	School-Aged Child Health	J			
	Asthma		C		
	Allergies (Food and Respiratory)		C		
	Abusive Head Trauma	I			
	Behavioral Problems		BB		

\* Trending indicates that the evidence is from fewer than two strong causal studies or multiple studies that include only one location, author, or data set.

### Access to Needed Services

Paid family leave policies lead to increased leave-taking and improved access to postpartum care. Research from California found that the implementation of paid family leave was associated with mothers and fathers taking longer leave and both parents taking leave simultaneously.<sup>B,N,R</sup> One study found that the implementation of the policy increased the likelihood of maternal leave-taking by 3.6 percentage points<sup>N</sup> and another study found that leave-taking increased by 5 weeks for mothers, but only up to 3 days for fathers.<sup>B</sup> A separate study found that, while the implementation of the policy increased the probability of fathers taking leave by 0.9 percentage points, fathers were still taking only an average of 1.5 weeks out of the 6 weeks that were available at that time in California.<sup>R</sup> The study noted that mothers took an average of 9 weeks out of the 12 paid weeks available through both Temporary Disability Insurance and paid family leave at that time.<sup>R</sup>

Research suggests that the effect on leave-taking may be greater for unmarried women and Black women than mothers who are unmarried and of other racial and ethnic backgrounds; one study found that the probability of taking family leave increased by 7.2 percentage points for unmarried mothers (from a rate of 2% prior to the policy) and 10.6 percentage points for Black mothers (from a rate of 2% prior to the policy).<sup>N</sup> White mothers, meanwhile, saw a statistically insignificant 3 percentage point increase (from a rate of 11% prior to the policy). However, more research on leave-taking effects by subgroup would be valuable to corroborate these findings, which had fairly large standard errors.

Although the California policy has increased the uptake of maternity leave, a policy brief from the University of California at Davis reported that only between 25 and 40 percent of eligible mothers in California took advantage of paid family leave benefits approximately 10 years after implementation.<sup>31</sup> The study also found that “median earnings of leave takers are an estimated \$10,000 higher than the median income for all working women in California” (p. 1).<sup>31</sup> Although some of this difference may be attributed to a differential likelihood of eligibility based on income, research also suggests that awareness of eligibility is low. A 2011 study found that only half of eligible adults reported they knew about California’s paid family leave, with lower-wage earners least likely to know about it.<sup>6</sup>

A 2020 study of San Francisco’s paid leave ordinance corroborated this finding.<sup>W</sup> The study examined uptake of paid leave in San Francisco compared to surrounding areas in California after San Francisco implemented an expansion to California’s paid leave policy, bringing reimbursement for private sector employees to 100 percent of wages. The authors found that the policy was linked to a 13 percent increase in leave-taking for fathers (from a rate of 43% prior to the policy), but no significant increase for mothers. They noted that 89 percent of women in the sample were already taking about 12 weeks of leave through paid leave and Temporary Disability Insurance and hypothesized that the ordinance may not have had a significant effect due to low awareness. For example, a survey associated with the study found that less than 2 percent of mothers with low incomes had accurate information about the new policy. The study found that 61.6 percent of non-Medicaid covered women employed in San Francisco knew about the policy, compared to just 9.7 percent of women covered by Medicaid. Increasing awareness of state and local paid family leave policies could increase participation and allow more families, especially lower earners, to reap the child and parental benefits supported by the evidence, discussed in this review.

Research from Rhode Island links statewide paid family leave policies to postpartum care access.<sup>Z</sup> Researchers used data from births in Rhode Island between 2012 and 2016 to examine the impact of the state’s 2014 4-week paid family leave law, as compared to nearby states that did not have a paid family leave program. The study found that the policy led to a 2.2 percentage point increase in women receiving postpartum care, and the effect was greater for women of color (3.4 percentage points for Black, Hispanic, Asian, American Indian women, and women of mixed race, compared to 1.5 percentage points for White women). The authors were unable to disaggregate the specific effects for all racial groups because of the small state population and resulting small sample sizes.

## Parents' Ability to Work

Research on the impact of paid family leave policies on mothers' employment and labor force participation finds mostly positive results. A study of California's policy found that paid family leave increased the probability of mothers working 1 year after a birth by between 12.9 to 18.3 percentage points, depending on how much work experience the mother had before the birth.<sup>B</sup> Additional research has shown that paid family leave is associated with higher labor force participation among young women.<sup>D,F,Q</sup> For example, one study of California and New Jersey's policies found a 5 to 8 percentage point increase in mothers' labor force participation rate in the months surrounding birth, as well as a significant increase in the number of weeks employed, compared to the number of weeks spent looking for work.<sup>D</sup> A second study that examined both states also found a positive impact of paid family leave policies on labor force detachment—in California, the authors found that paid leave reduced labor market exit by, on average, 20 percent per year across the 5 years after a birth; in New Jersey, paid leave reduced labor market exit by an average of 46 percent each year across the 5 years after a birth.<sup>Q</sup> The authors found that the effects were concentrated among women with high levels of education. Additional research studying the impact of California's paid family leave policy on establishment-level employment found that, following implementation of the policy, California employers had an increase of nearly six employees per firm on average, with even greater increases in large firms (i.e., approximately eight employees).<sup>iv,CC</sup>

Another study found that labor force participation increased by 1.5 percentage points for young women in California following the implementation of paid family leave.<sup>F</sup> The study, however, also reported unanticipated effects of paid family leave: a significantly higher unemployment rate (an increase of between 0.3 and 1.5 percentage points) and longer durations of unemployment (1.73 weeks longer) among young women.<sup>F</sup> The author speculated that paid family leave may result in higher labor costs, and employers may engage in discriminatory hiring practices against younger women, causing higher unemployment rates in this group. However, this theory was not tested in the study, and other research suggests no such effect on employers.<sup>6</sup>

In addition to increased labor force participation, three studies on California's paid family leave found that the policy led to an increase in the employment and number of years mothers spent working following birth, compared to one study that demonstrated a decrease in the same outcomes. The first study found that, among employed mothers of children age 1 to 3, access<sup>v</sup> to paid leave increased usual weekly work hours by up to 17 percent when compared to mothers in states without access.<sup>N</sup> The second study found that a paid family leave policy increased weeks worked and average weekly hours worked during the child's second year by 7.1 weeks and 2.8 hours, respectively, for those who worked at least 20 weeks during their pregnancy.<sup>B</sup> The third study found that the implementation of the paid leave policy increased the probability of employment for mothers with low income by 11 percent one year after birth.<sup>AA</sup> In contrast, one study found that, in the 12 years after California's paid leave policy was implemented, employment decreased slightly (less than 1 percentage point) for women, with the impact being driven by younger women. The

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<sup>iv</sup> Large firms are defined in this study as establishments with greater than 100 employees.<sup>CC</sup>

<sup>v</sup> For the purpose of analyses, most studies included in this review defined "access" as "living in a state with a paid family leave policy" and examined outcomes relative to timeframes prior to implementation of the policy, relative to families in states without a paid leave policy, or relative to families without infants or young children. "Having access" does not mean that every family in the treatment sample was eligible for paid leave or received benefits.



same authors found that the policy led to a decrease in unemployment duration by about 1 week for young men with a high school degree or less.<sup>DD</sup>

One of the largest studies of California's paid leave policy to date found negative impacts on long-term employment and wages among first-time mothers who took leave immediately after the policy was implemented in 2004.<sup>A</sup> The authors found a reduction of 7 percent in maternal employment and an 8 percent drop in wages, 6 to 10 years after giving birth, among women who were eligible for paid leave at the time of their first birth (compared to those who gave birth a few months before policy implementation). However, the authors found that self-employment income offset some of the decrease in wages. The rationale for focusing on first-time mothers was that "the availability of paid leave may... have a greater impact on new mothers than on women who have already established their child care and work routines [because] women learn how to manage motherhood when they have their first child" (p. 16).<sup>A</sup> The long-term employment findings for all mothers eligible for paid leave were not statistically significant.

Findings for job continuity, or attachment to the pre-birth employer, are mixed but lean positive. One study examined the impact of benefit levels using a sample of mothers with earnings near the maximum benefit threshold in California (i.e., high-earning women), and the authors found that a 10 percent increase in the weekly benefit amount increased the likelihood that a mother would return to her pre-birth employer by up to 5 percent.<sup>O</sup> A study with a broader sample, men and women of childbearing age, found a positive and statistically significant 13 percent increase in the likelihood of working at the pre-birth job 1 year after the birth, with a paid family leave policy.<sup>B</sup> Very small and insignificant effects on job continuity were found in a study of the long-term effects of paid family leave in California.<sup>A</sup>

### ***Sufficient Household Resources***

The current evidence suggests that state paid family leave policies have mixed effects on household material wellbeing. A study from California with a large sample found that paid family leave was associated with better economic security for families.<sup>M</sup> The study found that household income was approximately \$3,400 higher (equal to 4.1 percent higher) among families with access to paid family leave relative to those who did not have access, and the effects were greater among married mothers, likely because they tend to take longer leaves than single mothers. The study also showed that families with access to paid leave were 10.2 percent less likely to be in poverty, with the greatest effects for single mothers with low incomes and levels of education.<sup>M</sup>

Two studies found statistically insignificant increases in wages as a result of paid family leave. The first, a study on California's paid family leave program between 1999 and 2010, found that an increase in weekly work hours for mothers who took paid leave led to very small, and statistically insignificant increases in wage income.<sup>N</sup> A study of post-birth employment outcomes associated with paid family leave found that the program led to a statistically insignificant increase in hourly wages of up to 5 percent at 1 year after birth.<sup>B</sup>

Other studies demonstrate the potential detrimental or null effects of paid family leave. One study found that paid family leave had a detrimental effect on the long-run annual wages of first-time mothers, with a net 10-year loss of \$24,000.<sup>A</sup> An additional study found that expectant mothers in

that state saved about 1.4 fewer months of household income in the year before the birth compared to mothers in other states without a paid leave policy,<sup>x</sup> possibly because they were anticipating the additional benefits from paid leave. However, this finding was not statistically significant and the author explained that the reduced incentive to save was concentrated among higher-income families. A final study found null effects on earnings in the 12 years after implementation of California's paid leave policy.<sup>DD</sup>

A study published in 2020 found economic benefits for families as measured by their reduced reliance on public assistance.<sup>v</sup> The author found that living in a state with paid maternity leave,<sup>vi</sup> versus not, decreased the use of Temporary Assistance for Needy Families (TANF) by 4.3 percent, and reduced the benefits received per year by \$104 per family. The author suggested that substituting paid family leave benefits for TANF funds can be de-stigmatizing because it allows families with low incomes to participate in an entitlement program rather than a public assistance program. However, the results were only significant for the period before the Great Recession, and the author cautions that many mothers who earn low incomes are better off with TANF than with PFL benefits. Therefore, the implications of the study's findings may be different depending on each individual family's overall resources.

A study on food security in California between 1999 and 2007 found that the enactment of a statewide paid family leave policy significantly improved food security for households with infants (under age 1) compared to states without such a policy.<sup>y</sup> The author attributed a 2.3 percentage point decrease in food insecurity to the paid leave law, and measured strongest effects for households below 185 percent of the poverty level and households with multiple children. Access to sufficient resources to purchase nutritious food may be one of the mechanisms driving better health outcomes for families in paid leave states, according to the author.

### ***Healthy and Equitable Births***

The impact of paid family leave policies on birth outcomes is limited, given that most leave policies aim to affect the period after the child's birth. However, a study of California's paid leave policy found that, following paid family leave's passage in 2004, postneonatal mortality (death after the first 28 days of life) decreased by 12 percent with no differences across racial groups, relative to states without the policy.<sup>s</sup> Impacts on preterm births and birthweight did not reach statistical significance. The authors suggest that access to paid leave may improve caregiver behavior and reduce the likelihood of accidents and precursors of infant mortality during early infancy.

### ***Parental Health and Emotional Wellbeing***

Three studies of California's policy and one study of California and New Jersey's policies found that parents' physical and mental health benefited when parents had access to paid family leave.<sup>C,P,T, BB</sup> A study on the impact of the California paid family leave policy found that mothers with access to paid family leave were more likely to report having very good or excellent mental health (an 8.6 percentage point increase) and coping well with the day-to-day demands of parenting (a 5.3 percentage point increase).<sup>c</sup> Effects on paternal mental health were not significant in this study.

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<sup>vi</sup> The study included California, Hawaii, New Jersey, New York, and Rhode Island as treatment states because they either had a Temporary Disability Insurance policy that covered pregnancy, or a paid family leave policy, or both.

Another study found multiple positive impacts on parent health (including mothers and fathers): a significant, 11 percentage point increase in the likelihood of reporting very good or excellent health, a 0.8 point reduction on a 24-point scale of psychological distress, an 8.2 percentage point decline in the risk of being overweight, and a 12 percentage point decline in any alcohol consumption.<sup>P</sup> Mothers reported greater impacts on distress and overall health, whereas fathers saw greater declines in alcohol consumption.

Two additional studies assessed the implications of paid family leave on parents' postpartum psychological distress. More specifically, one study assessing mothers of infants in California found that access to paid leave was associated with a 27.6 percent decrease in postpartum psychological distress, as measured by the Kessler Psychological Distress Scale.<sup>T</sup> In particular, the authors found the strongest reductions in stress for mothers ages 18 to 29 and for single mothers compared to older and married mothers, respectively. The authors also noted that the policy may have a stronger effect for Black and Hispanic mothers compared to White mothers based on point estimates, but the confidence intervals for these groups overlapped, precluding a definite conclusion. Lastly, a study examining the effects of paid leave policies in California and New Jersey found that, compared to states without paid family leave policies, exposure to a paid family leave was associated with a 0.49 point decrease (on a 24-point scale) in psychological distress among parents of children under age 2.

### ***Nurturing and Responsive Child-Parent Relationships***

Evidence to date suggests that state paid family leave policies may increase the quality of parent-child relationships.<sup>A,C</sup> A study that used data from the Survey of Income and Program Participation found that California's paid family leave policy led to mothers spending more time with their children up to 4 years after the birth; in particular, mothers with access to paid family leave reported reading to their children 2 more times per week, having breakfast with their children 0.7 more times per week, and going on outings with children 1.8 more times per month when compared with mothers who did not have access to paid leave.<sup>A</sup> A second study also examined reading, and found that parents were 8.2 percentage points more likely to read to their infants 4 or more days per week when they had access to paid leave in California, but the result was not significant.<sup>C</sup>

### ***Optimal Child Health and Development***

Evidence shows that parents with access to paid family leave in California saw some improvements in a variety of indicators of their infants' health and later child health in elementary school. In particular, increases in breastfeeding have been cited in multiple studies.<sup>G,H,K</sup> Evidence indicates null impacts of the policy on children's behavioral problems, however.<sup>BB</sup>

Four studies present evidence that access to paid family leave increases breastfeeding,<sup>G,H,K</sup> which has been linked in some research to a number of beneficial impacts for infants, including stronger immunity, reduced infections, and reduced infant mortality.<sup>32</sup> A study with a very large sample from California and New Jersey showed that paid family leave policies increased the percentage of exclusively breastfed infants at age 6 months by 1.3 percentage points.<sup>G</sup> The study also found statistically insignificant, but positive effects on any breastfeeding at 6 and 12 months. The authors noted that the relatively small overall effects found may underestimate the true effects among

working women, who are more likely to be affected by paid family leave policies, because the sample included both working and non-working women.

A second study found that in California, paid family leave led to a significant 5 percentage point increase in the likelihood of breastfeeding at age 6 months; the authors also report an increase in breastfeeding duration of 18 days, but this finding was not significant at the .05 level.<sup>K</sup> There was no significant overall effect found for breastfeeding initiation, however; the authors suggested that because many women had access to 6 weeks of paid leave through Temporary Disability Insurance, they were already quite likely to initiate breastfeeding prior to the new paid leave policy (85 percent of mothers breastfed). However, the policy had significant effects on breastfeeding initiation among some subgroups. For example, the study found the greatest effects for Black mothers (a 7.5 percentage point increase in the likelihood of breastfeeding at all) and for mothers with incomes below 50 percent of the federal poverty level (a 5 percentage point increase in likelihood of breastfeeding).<sup>K</sup> Overall, the study found greater effects on breastfeeding for less-advantaged groups, including those with lower education levels.

Two additional studies corroborate these findings, demonstrating that paid family leave increases breastfeeding duration. An additional study from California with a higher-income and less generalizable sample showed that paid family leave led to an increase in any breastfeeding for at least 6 and 9 months that ranged from 10 to 20 percentage points.<sup>H</sup> A study on paid family leave and breastfeeding duration found a somewhat smaller, but still significant impact.<sup>U</sup> The author found that the likelihood of breastfeeding for at least 6 months increased by 1.8 percentage points after the passage of California's paid leave policy. For infants born to families below the poverty line, the impact was 4 percentage points higher than for wealthier families and for infants in poverty living in states other than California.

Beyond breastfeeding, evidence suggests that state paid family leave policies may impact other indicators of health and development. A study of California found that after the paid leave policy went into effect, hospitals saw 6 percent fewer infant admissions overall, and decreased admissions by 33 percent and 15 percent for upper respiratory infections and gastrointestinal diseases, respectively.<sup>L</sup> Another California study found that infants whose families had access to paid family leave were 1.4 to 5 percentage points less likely to receive late vaccinations (measured for vaccines typically given before age 6 months), depending on the specific vaccination. The effect was even stronger for families with low levels of income, with a 5 to 7 percentage point reduction in the likelihood of receiving a late vaccination relative to similar families in states without paid leave.<sup>E</sup>

A third study revealed that California's policy increased the likelihood that a child had very good or excellent health, as reported by their parents, by between 4.8 and 8.6 percentage points (approximately 5 to 10% of the pre-leave mean).<sup>C</sup> The study also found a significant reduction in the likelihood of asthma (5 percentage points) for all children ages 0 to 17. Results for food and respiratory allergies were mixed, with mostly null impacts.

Paid family leave also appears to be linked to better child health in elementary school, suggesting that the policy can have long-lasting beneficial impacts beyond the infant years. One study showed that children whose families had access to paid family leave were less likely than those without to be

overweight (4.1 percentage point difference), have ADHD (0.7 percentage point difference), have hearing problems (2.4 percentage point difference), and have communication problems (1.1 percentage points difference), with greater effects seen among boys and among children with lower socioeconomic status for the likelihood of being overweight and having ADHD.<sup>J</sup>

Finally, a study on paid family leave in California showed that the policy was linked to a significant reduction in the rate of pediatric abusive head trauma in children below age 2.<sup>I</sup> For children below age 2, paid family leave led to a rate reduction of 2.8 cases per 100,000 children; for children under age 1, the policy led to 5.1 fewer cases per 100,000 children.<sup>I</sup> The authors suggested that this finding may be driven by reduced maternal stress and better mental health after the introduction of paid leave, a mechanism supported by other studies reviewed.<sup>C,P</sup>

### Is There Evidence That Paid Family Leave Reduces Disparities?

Studies have examined the differential impact of paid family leave policies based on race, education, and income and found mixed results across populations. For some outcomes, such as breastfeeding initiation, there is strong evidence that racial disparities exist, so it is possible to assess whether a statewide paid family leave policy can address that disparity. For other outcomes, such as receipt of postpartum care and maternal postpartum psychological distress, national data on current disparities is limited, therefore we are unable to assess how a statewide paid family leave policy would change disparities across groups. In this section, we present the subgroup findings from the strong causal studies reviewed and data on the underlying disparities when available.

Studies have shown that access to paid family leave varies by race and ethnicity: Only 23.2 percent of Hispanic parents have access to paid family leave, compared to 40.8 percent for Black non-Hispanic parents and 47.4 percent for White non-Hispanic parents.<sup>50</sup> One study examining multiple forms of leave-taking found that non-Hispanic Black and Hispanic women experienced the greatest increases in family leave-taking after the passage of a state paid family leave policy at 14.4 and 6.4 percentage points, respectively.<sup>N</sup>

The evidence to date shows mixed effects of paid family leave on breastfeeding initiation and duration by race and ethnicity. With respect to breastfeeding initiation, one study demonstrated that paid family leave increased the likelihood of mothers initiating breastfeeding for 90.3 percent of Asian infants, but for only 73.6 percent of Black infants in 2019.<sup>49</sup> However, another study demonstrated that Black mothers saw a greater increase in the likelihood of breastfeeding initiation when they had access to paid family leave than did White and Hispanic mothers and those of other races.<sup>K</sup> With regard to breastfeeding duration, results are mixed; one study showed that access to paid family leave led to increases in exclusive breastfeeding at 6 months among Hispanic women, but reductions in exclusive breastfeeding at 6 and 12 months among Black women.<sup>G</sup> A study that examined the effect of state paid family leave policies on breastfeeding duration at 3, 6, and 9 months found no differences by race and ethnicity.<sup>U</sup> The research to date is inconclusive about whether statewide paid family leave policies will reduce those gaps.

Stark racial disparities persist in birth outcomes, with infants who are Black, American Indian or Alaska Native, or Native Hawaiian and Other Pacific Islander experiencing the worst outcomes. One study to date has examined the impact of paid family leave on birth outcomes, but it found no

differences across racial groups.<sup>S</sup> This study examined preterm birth, low birthweight, infant mortality, and postneonatal mortality. The existing evidence does not suggest that state paid family leave policies are effective at addressing this inequality.<sup>51</sup>

Some evidence suggests that access to paid family leave improves maternal outcomes for women of color in the postpartum period. One study found that access to paid family leave led to a 1.26 point decrease in the K6 psychological distress score for Black women and a 1.5 K6 score decrease for Hispanic women, but a statistically insignificant decrease for White women.<sup>T</sup> Another study found that access to paid family leave increased receipt of postpartum care by 3.4 percentage points for non-White racial groups (specifically Black, Asian and Alaskan Native, Chinese, Japanese, Filipino, other Asian, American Indian, Hawaiian, mixed race, and other non-White) but only 1.5 percentage points for White women.<sup>Z</sup> No national data exist for these outcomes to assess whether these results represent reductions in disparities.

Early evidence also suggests that mothers with low incomes and low levels of education may experience particularly beneficial outcomes after the passage of a state paid family leave policies. One study showed greater improvements in maternal mental health and coping skills, as well as a greater increase in the likelihood of a family reading to their child more than 4 times per week for families with incomes below 150 percent of the federal poverty line compared to higher income families.<sup>C</sup> Another study found that the probability of late vaccination decreased by 5 to 7 percentage points, depending on the vaccination type, for families with low incomes relative to families with higher incomes.<sup>E</sup> A third study found that reductions in child incidence of overweight and ADHD were concentrated among families with low levels of income and maternal education.<sup>J</sup>

Paid family leave may have a greater impact for parents with low incomes and low levels of education because these parents are unlikely to receive benefits like paid leave through their employer, therefore a statewide policy may be their only opportunity to experience these benefits. In contrast, parents with high incomes and high levels of education may have already had access to paid parental leave, so this policy would change little for them.

## Has the Return on Investment for Paid Family Leave Been Studied?

Despite initial concern about the impact of the policy on employers and businesses, studies have found that most employers report either “no noticeable effect” or “a positive effect” of paid family leave on employee productivity, profitability, turnover, and morale.<sup>6,34</sup> More rigorous research on the return on investment for paid family leave, beyond employer surveys, is needed to build the evidence base. A more comprehensive analysis of the return on investment is forthcoming.

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

The research to date shows that the implementation of paid family leave policies in the United States is effective at supporting labor force attachment and improving maternal and child health and parenting outcomes. The evidence from the most methodologically rigorous studies shows that parents take longer periods of family leave and that families achieve greater economic security when they have access to paid leave. Additional research also shows positive effects for maternal health and for a variety of child health outcomes.<sup>A36</sup>

Although the current evidence generally supports the notion that paid family leave has positive impacts on family outcomes, most of the research to date comes from California because of the recent enactment and implementation of statewide leave laws. Between 2004 and 2020, the period examined by most strong causal studies, California offered 6 weeks of paid family leave. Therefore, the bulk of the evidence describes the effect of a 6-week paid family leave policy. Research that assesses families in states with greater lengths of leave is needed to fully assess the impact of paid family leave as additional states begin to implement their laws and other states continue to expand their policies.

Additionally, the current research is not able to assess the complete impact of paid family leave for families with low incomes and fathers, whose take-up rates are lower than families with higher incomes and mothers, respectively.<sup>31,R</sup> Few studies focus on how fathers are affected by paid family leave, despite the fact that research from other countries has shown positive outcomes for the entire family if fathers take paternity leave.<sup>37</sup> Noncustodial fathers are absent from this research in particular. Reliable data on access to paid leave and leave-taking across the US are also limited; the Bureau of Labor Statistics' American Time Use Survey does not provide sufficient sample sizes in every state to gain a complete picture of access to and take-up of paid family leave.

Finally, a more nuanced understanding of the optimal length of paid family leave, the percent of pay, and the best funding source is necessary to highlight the specific components of paid family leave that lead to the greatest impacts on health and wellbeing. Findings from three studies that were not included in this review because of limitations in the study design or a focus on factors other than statewide policy suggested that the benefits of paid leave may accrue when mothers take more than 6 weeks—in particular, maternal mental health and breastfeeding outcomes may be better when mothers return to work after 12 weeks of leave.<sup>38,39,40</sup> However, rigorous research on state policy in the US currently only extends to 6 weeks, as many states are just now implementing their paid leave policies and extending the number of weeks of leave above this level.

If a state aims to ensure that new parents have the time, services, and economic security they need to help their infants achieve and sustain a strong and healthy start in life, the evidence suggests that implementing a paid family leave policy of at least 6 weeks will help reach these policy goals.

Momentum for passing paid family leave policies has strengthened as a result of the COVID-19 pandemic, which has exacerbated the difficulty many families have when trying to balance work and the care of children or other family members. In response to the crisis, the federal government passed the Families First Coronavirus Response Act in March 2020, which included provisions supporting emergency paid leave for many employees.<sup>46</sup> For example, the Act provided “up to an additional 10 weeks of paid expanded family and medical leave at two-thirds the employee’s regular rate of pay” for employees who had been with their employer for at least 30 days and had a child care need due to COVID-19 closures.<sup>46</sup> This benefit was expanded to 12 weeks in the subsequent Coronavirus Aid, Relief, and Economic Security (CARES) Act. The federal government reimbursed employers, through payroll tax credits, for each dollar spent on these benefits through March 31, 2021, however the requirement to provide leave expired December 31, 2020.<sup>47,52</sup>

## Is Paid Family Leave an Effective Policy for Improving Prenatal-to-3 Outcomes?

The evidence demonstrates that a paid family leave policy of at least 6 weeks is an effective policy for improving a variety of child and family outcomes. In particular, paid leave policies increase the length and likelihood of leave-taking among mothers and fathers, increase mothers' labor force participation, improve mothers' mental health, support more nurturing child-parent relationships, and foster better child health.

## How Does Paid Family Leave Vary Across the States?<sup>vii</sup>

As of October 1, 2022, 12 states<sup>viii</sup> (California, Colorado, Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, Washington, and the District of Columbia) have enacted paid family leave laws, but not all states have fully implemented the laws yet. State laws vary in the number of weeks of leave offered, percentage of pay provided, level of job protection, and the funding mechanism.

Paid leave policies to bond with a new child currently offer a range of 5 weeks in Rhode Island to 12 weeks in, Colorado, Connecticut, Delaware, Maryland, Massachusetts, New Jersey, Oregon, and Washington.<sup>14</sup> Only seven states currently have a paid family leave policy of at least 6 weeks and have begun paying benefits (California, Connecticut, Massachusetts, New Jersey, New York, Washington, and the District of Columbia). All 12 states with a paid family leave policy in place cover private sector employees, with, Maryland, Massachusetts, New Jersey, Oregon, and Washington covering state employees as well.<sup>ix</sup>

Some states have enacted less expansive policies that provide paid family leave to some or all state employees, including Arkansas, Delaware, Idaho, Indiana, Kansas, Missouri, North Carolina, New Mexico, Tennessee, and Virginia.<sup>x</sup>

Table 3: State Variation in Paid Family Leave

State has adopted and fully implemented a paid family leave program of a minimum of 6 weeks following the birth, adoption, or the placement of a child into foster care				
State	Policy Adoption Yes/No	Maximum Number of Weeks of Paid Family Leave Benefit	Wage Reimbursement Rate	Maximum Paid Family Leave Benefit Value (Weekly)
Alabama	No	-		-
Alaska	No	-		-
Arizona	No	-		-
Arkansas	No	-		-

<sup>vii</sup> For details on state progress implementing paid family leave, see the paid family leave section of the US Prenatal-to-3 State Policy Roadmap: <https://pn3policy.org/pn-3-state-policy-roadmap-2022/us/paid-family-leave>

<sup>viii</sup> State counts include the District of Columbia.

<sup>ix</sup> See references 15, 16, 17, 18.

<sup>x</sup> See references 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.



Table 3: State Variation in Paid Family Leave (Continued)

State has adopted and fully implemented a paid family leave program of a minimum of 6 weeks following the birth, adoption, or the placement of a child into foster care				
State	Policy Adoption Yes/No	Maximum Number of Weeks of Paid Family Leave Benefit	Wage Reimbursement Rate	Maximum Paid Family Leave Benefit Value (Weekly)
California	Yes	8	60-70%, depending on income	\$1,540
Colorado	No**	12	90%	\$1,100
Connecticut	Yes	12	95%	\$840
Delaware	No**	12	80%	\$900
District of Columbia	Yes	8	90%	\$1,009
Florida	No	-		-
Georgia	No	-		-
Hawaii	No	-		-
Idaho	No	-		-
Illinois	No	-		-
Indiana	No	-		-
Iowa	No	-		-
Kansas	No	-		-
Kentucky	No	-		-
Louisiana	No	-		-
Maine	No	-		-
Maryland	No**	12	90%	\$1,000
Massachusetts	Yes	12	80%	\$1,084
Michigan	No	-		-
Minnesota	No	-		-
Mississippi	No	-		-
Missouri	No	-		-
Montana	No	-		-
Nebraska	No	-		-
Nevada	No	-		-
New Hampshire	No	-		-
New Jersey	Yes	12	85%	\$993
New Mexico	No	-		-
New York	Yes	12	67%	\$1,068

Table 3: State Variation in Paid Family Leave (Continued)

State has adopted and fully implemented a paid family leave program of a minimum of 6 weeks following the birth, adoption, or the placement of a child into foster care				
State	Policy Adoption Yes/No	Maximum Number of Weeks of Paid Family Leave Benefit	Wage Reimbursement Rate	Maximum Paid Family Leave Benefit Value (Weekly)
North Carolina	No	-		-
North Dakota	No	-		-
Ohio	No	-		-
Oklahoma	No	-		-
Oregon	No**	12	100%	\$1,590
Pennsylvania	No	-		-
Rhode Island	No** <sup>xi</sup>	5	60%	\$1,007
South Carolina	No	-		-
South Dakota	No	-		-
Tennessee	No	-		-
Texas	No	-		-
Utah	No	-		-
Vermont	No	-		-
Virginia	No	-		-
Washington	Yes	12	90%	\$1,327
West Virginia	No	-		-
Wisconsin	No	-		-
Wyoming	No	-		-
Best State	N/A	12		N/A
Worst State	N/A	-		N/A
Median State	N/A	12		N/A
State Count	6	N/A		N/A

\*\* in the Yes/No column indicates that the state has passed legislation enacting a paid family leave benefit but that the benefit is not yet available. Policy adoption, generosity and variation data: As of October 1, 2022. State statutes and legislation on paid family leave. For additional source and calculation information, please refer to the Methods and Sources section of [pn3policy.org](http://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

<sup>xi</sup> Rhode Island currently provides up to 5 weeks of paid family leave, however benefits will increase to up to 6 weeks in 2023.

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 February 28, 2022.

### **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 controlled 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, RCTs 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**

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