*Effects of Universal and Unconditional Cash Transfers on Child Abuse and Neglect**

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Abstract

We estimate the effects of cash transfers on a severe measure of child welfare: maltreatment. To do so, we leverage year-to-year household variation from a universal and unconditional cash transfer, the Alaska Permanent Fund Dividend (PFD). Using linked individual-level administrative data on PFD payments and child maltreatment referrals, we show that an additional $1,000 to families in the first few months of a child's life reduces the likelihood that a child is referred to Child Protective Services by age three by 1.3 percentage points, or 8 percent, on average. Effects persist through early childhood and are unlikely to be driven by birth seasonality or reporting. Our findings suggest that the benefits of unconditional cash transfers to children may outweigh the costs.

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I. Introduction

In recent years, cash transfers have gained popularity as a way to reduce income inequality, with some proponents arguing that universal transfers should replace existing welfare programs. Given that public investments in early life yield the largest societal benefits, one way to evaluate whether an unconditional cash transfer program would increase total social welfare in a cost-effective way is to test whether such programs positively impact child health and well-being (Hendren and Sprung-Keyser, 2020). Indeed, there is a body of evidence showing that means-tested cash transfers like the earned Income Tax Credit (EITC) and child tax credit (CTC) in the United States (US) reduce child poverty, improve birth outcomes, and increase test scores, school performance, and earnings later in life (Eissa and Hoynes, 2006; Dahl and Lochner, 2012; Hoynes, Miller, and Simon, 2015; Bastian and Michelmore, 2018; Borra, Costa-Ramon, Gonzàlez, and Sevilla-Sanz, 2021; Barr, Eggleston, and Smith, 2022). Despite this fact, the EITC and CTC are conditional on employment and tax filing and do not reach all eligible households. For example, only 80 percent of eligible households received the EITC in 2016 (Tax Policy Center, 2020).

In this paper, we test whether more universal cash transfers could improve both minor and severe outcomes of child well-being and further improve children's lives. In particular, preventing harmful behavior and maltreatment for children before they reach school age is of critical importance for their economic trajectories and for society as a whole (Bradbury, Corak, Waldfogel, and Washbrook, 2015). To address this, we ask: how much can unconditional and universal cash transfers affect child health and well-being in terms of children's probability of maltreatment, mortality, home environment, and family structure? We address this question in the context of an existing universal basic income program, the Alaska Permanent Fund Dividend (PFD).

The Alaska PFD provides annual, individual payments to each Alaska resident, regardless of immigration status, income, or wealth. Historically, the PFD averages $1,600, although payment generosity varies from year to year. Unlike other cash transfer programs, including Temporary Assistance for Needy Families (TANF), the EITC and CTC, the Alaska PFD is not dependent on

employment or household income. Moreover, existing evidence indicates that the PFD indeed does not affect aggregate labor supply (Jones and Marinescu, 2022; Bibler, Guettabi, and Reimer, 2023); therefore, the Alaska PFD serves as a true unconditional and universal cash transfer program. Because of the universal nature of the program, and the generosity of the transfer, we may expect different, and potentially larger, effects of the PFD on child maltreatment than other tax transfers.

Using administrative data on PFD payments as well as longitudinal birth cohort data from the Pregnancy Risk Assessment Monitoring System (PRAMS) linked to individual-level child maltreatment referral data from the Alaska Office of Children's Services (OCS) from 2009–2021, we exploit variation in both the date-of-birth PFD eligibility cutoffs for infants, and the annual PFD payment amounts to estimate the marginal effects of universal and unconditional cash transfers on child neglect and physical abuse. In other words, since all Alaskan residents are eligible to receive a cash payment each year, we use data on cumulative PFD payments to test whether changes in transfer amounts affect child outcomes, including child maltreatment and child mortality, between birth and age three.[1] To estimate causal effects, we compare infants born within the same 12-month period in otherwise-similar families, where some households receive an additional PFD payment within the first year of their child's life and some households do not. This strategy has the advantage of allowing us to look at longer-term effects of the cash transfer. We additionally present results akin to other papers that similarly use the December 31 cutoff to identify effects, eliminating a donut of observations near the threshold (Rittenhouse, 2023).

We find that, on average, a cumulative $1,000 in early childhood reduces the likelihood of a child maltreatment referral by 1.3 percentage points, or 8 percent. This is driven by reductions in child neglect and physical abuse referrals by age three by 10 and 18 percent, respectively. We provide evidence that this is not driven by seasonality of births or changes in reporting. We also find that additional PFD transfers reduce substantiated referrals and additional referrals among the existing child welfare-involved population. We then study a more severe outcome that is less likely to be systematically underreported–child mortality–and show that an additional $1,000 in PFD funding

[1]Our main results are up to age three due to the data available to examine mechanisms, but we also show results up to age five in the appendix.

in the early months of a child's life could reduce the likelihood of a child death by age three. These findings on physical abuse and mortality suggest that additional cash transfers to families do not reduce maltreatment through merely a mechanical reduction in neglect via purchasing food or other resources. Our findings also show that preventing maltreatment in the first year of a child's life has persistent effects on maltreatment in the longer term.

To further investigate within-household behavioral effects of the PFD, we use 3-year follow-up responses in the Alaska Childhood Understanding Behaviors Survey (CUBS) linked with the administrative OCS referral data. These data allow us to estimate the extent to which marginal increases in PFD payments affect several variables that serve as a proxy for household environment, parental time investments, health care utilization, safety net participation, and family stability.

Using the CUBS data, we find that families receiving an additional $1,000 in PFD funds early in a child's life leads to a more stable household environment by age three, including a higher likelihood that a child still lives with their mother and a lower likelihood of moving. We find little evidence of other channels, including health care take-up or childcare, driving our effects. Therefore, we posit that the PFD may reduce maltreatment through increased family stability. Notably, these effects may also be partially driven by a reduction in financial stress, leading to a healthier household environment.

Our findings introduce new contributions to a large literature on cash transfers and family well-being and have several important policy implications. First, by estimating the reduced-form effects of marginal changes in PFD payments, we isolate the effects of a cash transfer not tied to employment or tax filing. This distinction allows us to disentangle how cash–not changes in taxes or wages–drives changes in child outcomes. This feature is especially important given that prior research indicates that income increases from child support pass-throughs, higher minimum wages, a more generous EITC, and other tax benefits reduce involvement with the child welfare system (Cancian, Yang, and Slack, 2013; Raissian and Bullinger, 2017; Biehl and Hill, 2018; Berger, Font, Slack, and Waldfogel, 2017; Rittenhouse, 2023; Schneider, Bullinger, and Raissian, 2022; Kovski, Hill, Mooney, Rivara, Morgan, and Rowhani-Rahbar, 2022; Bullinger and Boy, 2023).

In particular, Rittenhouse (2023) finds that an additional $1,000 of EITC benefits reduces child maltreatment referrals by 3 percent. We note that one possibility behind our larger coefficients is that expanding such benefits to everyone while not imposing work requirements may reduce child maltreatment even further. Moreover, because we are able to observe how much families receive, and because the payment schedule varies substantially across our sample period, we are able to observe how the estimates change in higher versus lower PFD payment years. Consequently, we can address whether child maltreatment also responds linearly to injections of cash within the household.

Second, we analyze the impacts of universal and unconditional cash transfers on child maltreatment, a critical measure of child well-being. In doing so, we expand on work showing that families use cash transfers to invest within the household. For example, research from a randomized control trial (i.e., the Baby's First Years study) from 2019–2021 shows that an unconditional cash transfer of $333 per month to mothers in their infant's first year of life, as compared to only $20, increased spending on child-specific items such as books, toys, diapers, and clothing (Gennetian, Duncan, Fox, Magnuson, Halpern-Meekin, Noble, and Yoshikawa, 2022).[2] This cash transfer also increased the amount of time mothers spent in early learning such as reading books, telling stories, and playing with their infant and had no significant effect on maternal labor supply or substance use (Troller-Renfree, Hart, Sperber, Fox, and Noble, 2022; Yoo, G.J. Duncan, and Magnuson, 2022; Sauval, Duncan, Gennetian, Magnuson, Fox, Noble, and Yoshikawa, 2024). We build on this literature by using a natural experiment to study families for a longer sample period (2009–2021).

Lastly, our findings that cash transfers can reduce child maltreatment have important policy implications for broadening cash transfer programs. Importantly, we shed new light on how universal transfers may be able to better reach a vulnerable population: children. While recent research provides new evidence that cash transfers from smaller, targeted programs, like SSI, have merely modest effects on health, mortality, and educational achievement (Hawkins, Hollrah, Miller,

[2]Similarly, recent RCT studies show that large temporary unconditional cash transfers increase short-term consumption and improve financial health, stress and food security, although such improvements are not long-lasting (Miller, Rhodes, Bartik, Broockman, Krause, and Vivalt, 2024; Bartik, Rhodes, Broockman, Krause, Miller, and Vivalt, 2024).

Wherry, Aldana, and Wong, 2023), the universal nature of the PFD allows us to speak to how larger cash transfers can affect communities at scale. Moreover, given that the vast majority of children in the bottom income decile of the US do not qualify for other transfers, like the CTC, and other programs (e.g., TANF), maintain lifetime participation limits, our findings have implications for expanding the scope of existing programs to children in households that have little income from employment but may still be at risk of maltreatment (Goldin and Michelmore, 2022).

II. Background

II.1. Alaska's Office of Children's Services

Child Protective Services (CPS) is the government agency responsible for the assessment, investigation, and intervention regarding cases of child abuse and neglect. These agencies may take different names in different states; in Alaska the office is referred to as the Office of Children's Services (OCS). Suspected maltreatment cases are typically collected using a centralized hotline, where calls are screened and then forwarded to local offices for further consideration. Once a report is made and meets the inclusion criteria, OCS is required to investigate the allegation of abuse or neglect, usually within 1-7 days, depending on the case severity, although there is no mandate to thoroughly investigate each case. Once investigated, cases will be categorized as either "substantiated" or "unsubstantiated," based on the outcome of the investigation. Substantiated cases make up approximately 13 percent of all investigated cases. However, even in instances in which a case is not substantiated, children in such households can still be at a similar risk of maltreatment (Kohl, Jonson-Reid, and Drake, 2009).

Importantly, while a main stated goal of OCS is to refer families to community resources, OCS does not itself provide financial support or services directly to families.[3] Above all, OCS values permanency in a safe environment. As a result, the agency is primarily responsible for ensuring

[3]The occasional exception is substance use services. Specifically, The Family First Prevention Services Act of 2018 provides states the option to use funds for prevention services and programs, including substance use, mental health, and parental skill training, to families at risk of entering the child welfare system, with the goal of keeping children in their homes. Alaska has submitted its prevention plan, but it had not yet been approved during our study period.

the safety of the child and, when necessary, initiating legal interventions and placing children into foster care or other longer-term, safe housing solutions.

II.2. The Alaska Permanent Fund Dividend (PFD)

The Alaska PFD is a sovereign wealth fund, consisting of a portion of the state's oil royalties. Since 1982, a portion of the Alaska Permanent Fund has been distributed to all Alaskan residents in the form of the PFD. The PFD is calculated per resident, and every individual resident in Alaska receives the same amount as everyone else in a given year. There are no work conditions or requirements for the PFD, other than Alaska residency. Alaskan residents can apply online or via mail for the PFD each year between January and March, with disbursement typically in October. Take-up is over 92 percent statewide, and eligible take-up is nearly 100 percent.

The PFD payment amount varies from year to year according to the investment earnings of the Permanent Fund, and there is substantial variation in this amount over time. Figure 1 documents the amount of the PFD in 2016 dollars from 2000 to 2016. While the PFD was only $878 in 2012, it ranged from over $1,800 to nearly $2,100 in 2014 and 2015, respectively. We note that the PFD does not systematically correlate with unemployment rate or child maltreatment referrals, providing some assurance that marginal changes in PFD amounts could exogenously affect within-household behavior.[4,5]

Across households, PFD payments are dependent on the number of children living in the household in the previous calendar year. To be eligible for the fall payment, a child must have been born before December 31 of the prior year. In other words, families with children born in January will not receive the PFD payment for that child until the child is approximately 22 months old. In contrast, a child born in December will be eligible for their first payment at 10 months of age.

[4]For visual evidence on the relationship between yearly PFD payments, unemployment rates, and OCS referrals, see Figure A1.

[5]We note, as shown in Figure A1, the increase in referrals between 2016–2018 follows a nationwide upward trend in child maltreatment reports. Moreover, in mid-2016, Alaska centralized its intake of referrals, later rolling out a toll-free number for all geographic areas, making it easier for reporters to call in. Beginning in July 2017, Alaska's OCS implemented a more streamlined documentation process, which included an emphasis on voice dictation to help case worker's meet deadlines. We further discuss how this could play a role in our empirical approach below.

We use this variation in the PFD amounts across otherwise-similar households to test the effects of an unconditional cash transfer on child well-being. The PFD has been shown to influence Alaskan residents in ways that could be connected to child maltreatment. For example, one study, Watson, Guettabi, and Reimer (2020), estimates the short-term effects on crime in the days and weeks following the annual disbursement of the PFD. They find that the PFD increases substance abuse-related crimes but reduces property crimes. Importantly, this provides some support for the idea that the PFD could *increase* violence against children, if substance-abuse related crimes are tied to child maltreatment.

Generally, the labor market effects of the PFD have been shown to be minimal, although there is some evidence that mothers of young children reduce the number of hours worked in the short term (Jones and Marinescu, 2022; Bibler, Guettabi, and Reimer, 2023). While additional time spent at home could reduce maltreatment from non-parent perpetrators, this may also increase maltreatment opportunities from mothers. On the other hand, reducing stress from work may be one channel in which the PFD could improve both parent and child outcomes.

Finally, recent work shows that the PFD, similar to other cash transfers in the US, allows for greater household investments for children, which can improve child well-being. For example, Amorim (2022) finds that, compared to households with children in other states, Alaskan households increase spending on children's clothes, equipment for infants, and electronics in the months following the PFD disbursement. Moreover, Watson, Guettabi, and Reimer (2019) additionally document reductions in children's body mass index (BMI) as a result of the child's PFD eligibility due to date of birth cutoffs, implying potential investments in healthier foods. Overall, while the above studies provide evidence on how the PFD can affect labor market participation and child health, there is little to no evidence on whether the PFD affects more severe outcomes for children.

III. Data

We use four main sources of data for this analysis, including a novel pairing of administrative and survey data, made possible by the ALCANlink project. ALCANLink integrates the Pregnancy Risk

Assessment Monitoring System (PRAMS), Alaska Childhood Understanding Behaviors Survey (CUBS), PFD payments, and Office of Children's Services records. These data sets provide relational tables which allow us to connect and construct the linked data for this study.[6] Data for individuals in our main sample is from the PRAMS survey 2009–2018 birth cohorts. The PRAMS data survey approximately one-sixth of all mothers in the two-to-six months following birth. The survey oversamples mothers who are Alaska Native and mothers delivering a low-birth-weight baby.

We link these survey data to individual-level administrative data on PFD payments. Information on PFD payments is from the Alaska Department of Revenue. These data span 2009–2021 and document the number of PFDs received at a particular address. We observe whether the child's household received a PFD that year and the number of PFDs received by the household, allowing us to track the years in which families receive funds and measure how these funds vary from year to year.[7] These data also include the child's date of birth, according to government records.

To estimate the effects of unconditional and universal cash on child maltreatment, we then link the PRAMS data with child maltreatment referral data from the Alaska Office of Children's Services (OCS). These case-level data include the date of the alleged incident, date of referral, type of maltreatment alleged, assessment determination (substantiated or not), relationship to the perpetrator, and response priority time. These data also contain information on mother characteristics, including educational attainment, marital status, Medicaid status, and whether the child is first-born. No demographic data on the child (e.g., gender, race/ethnicity, or Native status) are available to us, nor is information on parental work status and household income.

Our main outcomes of interest are the likelihood of a child maltreatment referral, split by maltreatment type and assessment determination (i.e., substantiated or unsubstantiated). Substantiated referrals are screened-in calls for which a case worker performed an investigation and the case

[6]For more information on the ALCANlink Project, see Parrish, Shanahan, Schnitzer, Lanier, Daniels, and Marshall (2017).

[7]Although we cannot track PFD assignments by name, we assume that each unique PFD address represents a household. In later analyses, we omit PFD addresses with a large number of recipients to avoid estimating effects for group homes where we may be unable to pick up effects for a single child.

presented sufficient evidence to confirm the alleged abuse or neglect. Although the substantiated referrals seem as though they might better measure "true" maltreatment, unsubstantiated cases and substantiated cases have been previously shown to demonstrate similar risk levels (Kohl, Jonson-Reid, and Drake, 2009). In other words, although we additionally present results for substantiated cases, we prefer to include unsubstantiated cases because cases that get substantiated are sometimes due to agency capacity, not due to the details of the case.

One major advantage of our data is that we are able to observe all types of referrals, including calls that were "screened-out," implying that OCS did not move forward with investigation. In our definition of unsubstantiated calls, we include both screened-in and screened-out calls. Substantiated referrals include only screened-in cases, by definition. Furthermore, we examine referrals by response priority time (a proxy for severity) and the alleged perpetrator. We also study whether the number of referrals is affected by the PFD, conditional on exposure to the child welfare system (i.e., the intensive margin).

Additionally, these data contain a child's date of death, if applicable. Although we cannot determine the cause of death directly, we are able to additionally focus on children with previous interactions with the child welfare system and examine whether unconditional income from the PFD affects child mortality more broadly.[8]

These data have several advantages over more commonly used child maltreatment data, as we are able to see both unsubstantiated and screened-out reports, which are typically missing in nationwide datasets. However, we note that we are unable to observe siblings to determine within-household shocks that affect another child, and we do not have information on reporters. Therefore, while we can estimate effects by perpetrator type, we cannot observe changes in reporting maltreatment over time. We also do not have information on a child's sex, and cannot separately estimate effects for girls and boys.

Lastly, we link the PRAMS data to its 3-year follow up, the CUBS from 2012–2021.[9] Together,

[8]We note that, because the PRAMS oversamples low birth weight infants, estimates may be biased upwards. We account for this possibility in greater detail below.

[9]For our sample, CUBS contains about half of the mothers identified in the PRAMS.

the PRAMS and CUBS data consist of a sample of children born between January 2009 and December 2018 (observed in the PRAMS), followed up in the CUBS (between 2012 and 2021). CUBS is an Alaska-specific program developed as a 3-year follow-up survey to the PRAMS survey to better understand early child behaviors and outcomes. It is administered two months after a child's third birthday to all PRAMS survey respondents who remain in-state. These data provide additional information about household environment and parental behaviors like parental incarceration, food insecurity, and caregiving at age three, allowing us to address potential effects within the household. While CUBS is a smaller sample than PRAMS, individuals included in the follow-up are not systematically different than those observed in PRAMS in terms of observables such as daycare or healthcare take-up, program participation, or family structure.

We address potential changes in reporting due to the PFD in a number of ways. First, we note that although child maltreatment has been shown to suffer from reporting bias, estimates for physical abuse and mortality may be less likely than neglect to be misreported due to the clinical attention required. Second, we note that the proportion of substantiated cases to total cases does not change over time, suggesting that the volume of cases moving forward through the courts does not react to variation in PFD amounts. Therefore, the PFD is not responsible for changing the volume of cases reported nor the rate of those fully investigated. Third, as described in more detail below, our empirical approach compares children born within the same 1-year period, which helps us to mitigate effects driven by macro trends in crime or reporting.

Summary statistics are shown in Table 1. Approximately 16 percent of children experience a child maltreatment referral before age three, with neglect constituting the majority of these allegations. The majority of perpetrators are parents of their victims. Nearly 5 percent of children experience a substantiated child maltreatment referral by age 3. Most mothers in our sample are married at birth (64 percent), about 44 percent have a high school education or less, and 23 percent are insured by Medicaid. On average, mothers are about 28 years old at the time of the birth and have 3 dependents.

IV. Empirical Approach

In our main analysis, we leverage variation in yearly PFD benefit amounts and date-of-birth eligibility cutoffs. One way to estimate a causal effect of the PFD on child maltreatment is to exploit the discontinuity in the January 1 cutoff for PFD eligibility and calculate a local average treatment effect. However, we note that this cutoff is also applicable for child-related tax benefits, and that there is evidence that socioeconomic status is tied to birth timing (Buckles and Hungerman, 2013; Rittenhouse, 2023). Therefore, in an effort to make use of the full range of the data, and to better estimate effects for children in otherwise-similar households, we begin by considering a model of the following form:

$$y_i = \beta_0 + \beta_1 PFD_i + \lambda_c + X_i + u_i \tag{1}$$

where y represents whether child i was ever referred to OCS for child abuse or neglect during the study period by the time the child reaches age three. The variable of interest, PFD, is a variable equal to the cumulative, or lifetime, PFD benefit amount received for child i by age three. Because we have linked follow-up survey data with reported outcomes for children at birth and again at age three, our main results document effects through age three. However, we also show separate effects of lifetime PFD amount on child maltreatment referrals by the time a child reaches ages 2, 4, and 5 in the appendix. Due to concerns about birth bunching at the end of the year, in all models we omit births that occur between December 24–January 8.

In some specifications, we additionally include X_i which contains the following characteristics of the mother, all measured at childbirth: education level, marital status, insurance status, and age.[10] We also include whether the child is the mother's first birth, and the number of people dependent upon the household income at birth (i.e., household size).[11] We weight estimates and

[10]We note that Medicaid, a public health insurance program, is available to women while pregnant. Therefore, insurance status should not differentially change across mothers based on timing of birth.

[11]Although the existing literature focuses on first births, we estimate effects for all family sizes, controlling for whether it is a mother's first birth. We do so because additional children each receive their own PFD and may experience maltreatment that is caused by the change in payment, even at older ages.

estimate means by the PRAMS sampling weights.

To appropriately compare children born around the date-of-birth eligibility cutoff, we include a PFD cohort year fixed effect, λ_c. In our preferred specification, we use the full set of data to allow for comparison of children born between July of calendar year t with children born through June of calendar year $t + 1$. Put simply, our main empirical approach compares children born in the six months prior to the eligibility cutoff for an additional household PFD payment, December 31, to those born in the six months afterwards, omitting the two-week window around the cutoff. However, we additionally present estimates for several different bandwidths, including a six month bandwidth to account for the fact that PFD disbursements occur in October. In our tightest bandwidth, we compare children born within the December-January continuum, similar to the conceptual design described above.

This specification allows us to estimate how marginal changes in PFD amount differentially affect two children of the same age born within 12 months of each other, where one household received an additional PFD in the first year of the child's life. Date of birth dictates the time until the first PFD payment. Year of birth dictates the amount of the first PFD payment. So, due to differences in the month of birth, year of birth, and variation in the annual amount of PFD, by age three, a child born in December 2013 would have received two PFD payments totaling $3,956 whereas a child born in January 2014 would have received just 1, totaling $2,072– a difference of $1,884. Note that this difference also varies across years due to annual changes in the amount of the PFD.

This strategy also helps to focus on longer-run changes in family behavior and persistence of maltreatment over time. Our inclusion of fixed effects and the fact that we study maltreatment by age 3 allows us to account for short-run fluctuations and seasonality in maltreatment. Below, we also present evidence that the October disbursement dates do not lead to sharp changes in maltreatment, suggesting short-run changes are less relevant for our analyses.

Since PFD amounts vary across years and within years across households, causal identification in this context relies on comparisons between children born across different PFD payout years of

birth (e.g., December 2013 compared to January 2014) with different lifetime household transfer amounts due to the amount of the PFD and the child's birthdate, relative to the eligibility threshold. Our approach implies that there is as-good-as-random variation in the amount of cash a family receives in a given year based on Alaska investments and whether a child was born by the end of the previous calendar year (i.e., December 31). To provide evidence for this assumption, we show that births in the latter half versus earlier half of the year are not systematically different on a number of observable characteristics. Next, in Section VI, we discuss this idea further and provide additional tests to support the validity of our identification assumption and show that neither birth seasonality nor selection drive our main results.

V. Results

In this section, we provide primary evidence that our empirical approach provides as-good-as-random variation in marginal cash transfer amounts by household. We then present results from the empirical approach described in Section IV for child maltreatment reports and child mortality.

V.1. Effects of the PFD on Child Maltreatment

First, in Table 2, we present evidence to support the identification assumption; namely, that the children in our sample born in the earlier half of the following year provide a good counterfactual for children in our sample born in the latter half of the year. To do so, we test whether birth parity or mother characteristics vary systematically across the treatment and control groups. Importantly, birth characteristics of these two groups are statistically similar, including first born status, mother's education, mother's insured status and mother's marital status, on average. This provides additional support for the idea that birth seasonality is not the main driver of any estimated effects of the PFD on maltreatment.

We additionally provide t-tests for differences in infant and mother characteristics using a broader set of Natality data for the state of Alaska and present these estimates in Table A1. Notably, children born in the earlier half of the year have a slightly higher birthweight of 3 grams, but similar

APGAR scores and number of prenatal visits. Moreover, mothers in the earlier half and latter half of the year are nearly identical in terms of marital status and Medicaid take-up, on average.

Next, in Table 3 we present the effects of a $1,000 cumulative household increase in the unconditional income from PFD on the likelihood of having a child maltreatment report by age 3. We display estimates and their corresponding standard errors for unsubstantiated referrals in the top panel and substantiated referrals in the bottom panel. Columns 1 and 2 display estimates for the likelihood of receiving any child maltreatment referral, while Columns 3 and 4 and Columns 5 and 6 split total referrals separately into referrals for neglect and physical abuse, respectively. Columns 1, 3, and 5 present estimates without controlling for any covariates, and Columns 2, 4, and 6 include covariates to account for observable mother characteristics.

Estimates in Columns 1 and 2 indicate that an additional $1,000 in lifetime unconditional cash leads to a 1.1–1.3 percentage point (8.1 percent) reduction in the likelihood of a child experiencing an unsubstantiated child maltreatment referral by age three. As shown in Columns 3–6, these effects are present for both neglect (10 percent decline) and physical abuse (18 percent decline).

For substantiated reports, shown in the bottom panel of Table 3, estimates indicate similar reductions of the PFD on child maltreatment. Specifically, we find an additional $1,000 in lifetime PFD reduces the likelihood of a child experiencing a substantiated referral by age three by 0.5 percentage points– roughly an 11.5 percent reduction. This effect is largely driven by fewer neglect referrals.[12,13] Estimates in Column 1 of Table 3 indicate that an additional $1,000 transfer to households in the first year of a child's life leads to about 120 fewer referrals to OCS for kids under the age of 3, and 50 fewer substantiated cases each year.

[12]As shown in Appendix Table A2 and Appendix Table A3 these effects are consistent across early childhood. Specifically, the decline is largest for children under the age of 2 but effects persist through age four. For children aged five, estimates for total referrals are statistically insignificant; however, reductions in substantiated claims remain significant.

[13]We have also tested whether there is a differential effect across the years in which PFD payments were larger, and find no systematic relationship between expectation of a larger payment nor "large" payment years having compounded effects. For example, estimates indicate a statistically significant and similar drop in referrals by age three in both the year with the highest payment amount (2015) as well as in the following year, when PFD payments were cut in half. Effects are generally similar in magnitude to the main results, although, when cutting the sample, estimates for some PFD cohort years are not statistically significant at conventional levels. See Appendix Table A6. Moreover, Table A6 provides evidence that our estimate are not sensitive to the changes made to Alaska's intake service in 2017 and increase in total referrals from 2016–2018.

Thus far, we have shown that an additional $1,000 of PFD funding affects the extensive margin of maltreatment (i.e., whether a child is ever referred to OCS). Next, in Table 4, we consider effects on the intensive margin and examine whether the PFD affects the *number* of referrals, conditional on having received a referral previously. This is especially important given that many children have multiple interactions with OCS, and these children may be the most vulnerable. Because of previous referrals to OCS, these are also children who are likely to be more closely monitored by the state, which could reduce reporting bias. Estimates in Table 4 Columns 1–6 indicate that larger PFD payments lead to fewer future unsubstantiated referrals for physical abuse and neglect, conditional on already having a referral, implying that the PFD has both extensive and intensive margin effects on child maltreatment. Estimates also indicate a reduction in substantiated referrals for neglect, but not physical abuse, although due to the reduction in precision, we cannot rule out large drops in physical abuse maltreatment of over 100 percent, mirroring the estimates for unsubstantiated physical abuse referrals.

In sum, focusing on our baseline estimates from Table 3 Column 2 and their respective confidence intervals, our findings suggest that the PFD leads to reductions in child maltreatment referrals by age 3 between 3.1 and 13.0 percent. We again note that our findings fit into a literature using discontinuities in tax benefits to show that an additional $1,000 in tax credits decreases referrals to CPS by age 3 by 3 percent and reduces criminal charges for fathers during a child's infancy by 39 percent (Rittenhouse, 2023; Bhardwaj, 2023). If anything, our results show that beyond any effects from tax income, which some lower-income families may receive, the large payments from the PFD can lead to economically meaningful and persistent effects throughout a child's early life. Next, we discuss the extent to which the PFD may affect younger or less-educated mothers differently and discuss which types of maltreatment cases are most affected.

V.1.1. Exploring Heterogeneity

In our primary empirical approach, we include controls for mother's marital status, education, and childbearing age and show that additional cash from the PFD reduces child maltreatment. However,

these average effects may mask important heterogeneity. For example, poorer households are those that may have tighter budget constraints and may be most responsive to large transfers. While we cannot directly analyze effects by household income, in Table A5 we analyze effects on subgroups by mother's characteristics. In Columns 1 and 2 we present estimates separately for unmarried and married mothers. We find declines in total referrals for both groups. In Columns 3 and 4 we show estimates by whether or not a mother has less than a high school education at birth. Estimates indicate that effects are driven by mothers with less than a high school degree, although magnitudes for both groups are similar, suggesting a 5–7 percent reduction. Nevertheless, if education serves as a proxy for household income, these findings are consistent with the notion that cash transfers may affect lower-income households the most. Finally, in Columns 5 and 6 we present estimates for women under the age of 24 and over the age of 24 at birth, respectively. Estimates are statistically similar across age groups, indicating that education is a larger driver of our effects than age.

Along these same lines, in Table A4, we separately analyze which types of referrals are most likely to respond to higher PFD payments. We do so to test whether a change in transfer amounts affects the most vulnerable children and/or whether the payments are affecting violence within the household. In Columns 1–2 we estimate effects by response priority type: "high" and "other" priority.[14] Importantly, the average reduction in reports is largest for cases that are considered higher priority (i.e., generate an OCS response within 24 hours), although declines in referrals hold across priority types. Furthermore, in Table A4 Columns 3 and 4 we present estimates by perpetrator type, split by parent and non-parent. We find that the previously reported declines in child maltreatment referrals are driven nearly exclusively by parent perpetrators. This finding may be unsurprising, given that we focus on children that are under five years old and likely have not yet entered school. Overall, estimates in Table A4 support the notion that cash transfers to parents help to reduce financial stress in the household that leads to family violence.

[14]In particular, "high priority" requires a response within 24 hours, while "other priority" cases require a response within 1 week.

V.2. Effects of the PFD on Child Mortality

We show above that an additional $1,000 in PFD payments to a household early in a child's life can lead to a reduction in referrals to OCS for both neglect and physical abuse, and that the total number of substantiated cases also falls with additional cash transfers. However, given that these outcomes may still be subject to underreporting bias, we also consider an even more severe outcome that is less likely to be underreported: child mortality. We note that mortality is an important, albeit rare, outcome to study given that 6 children in Alaska died in 2021 from maltreatment-related causes (U.S. Department of Health and Human Services, 2022). Because children referred to OCS for physical abuse and neglect by age two are very likely to be referred again to OCS before age five, we note that findings on mortality can also speak to the potential of early life cash payments to prevent severe outcomes that result from persistent violence.

In Table 5 we present results for child mortality before age 3. We are unable to observe cause of death, so we limit our sample to individuals with previous interactions with the Alaska OCS to get a better sense of mortality that may most likely be related to maltreatment.[15] Because of the nature of the data—namely, that mortality is a low-probability event and these data include many observations with zeroes—we present estimates from our standard OLS model in Column 1 and estimates from the corresponding Probit model in Column 2. Notably, considering all causes of death allows us to analyze a broader measure of child well-being and also avoid any systematic misreporting issues in child maltreatment reports.

Estimates in Table 5 are negative and statistically significant. For the OCS-involved sample, Probit estimates suggest a decline in mortality corresponding to 2 fewer deaths per cohort. Because mortality is a more severe outcome that is much more likely to be reported, as compared to neglect, we also note that these findings provide some support for the idea that increases in PFD payments do not themselves lead to changes in maltreatment reporting. The magnitude of these estimates are

[15]We acknowledge that medically vulnerable children may also be more likely to be involved in the child welfare system, which may bias our results upwards. We note that our estimates are not sensitive to this restriction; when analyzing the full sample the findings are substantively similar, amounting to a statistically significant 24 percent reduction in mortality by age three.

about one-third of the size of our estimates for physical abuse referrals, suggesting that reducing physical abuse could be a main channel in preventing child deaths. We also note that since we do not have exact cause of death, estimates may overstate the extent to which the reductions in deaths are purely due to maltreatment.

VI. Testing the Sensitivity of the Estimates

In this section, we explore the sensitivity of our estimates to functional form and various threats to identification. First, we provide evidence that our estimates are not sensitive to various functional forms in Appendix Table A7. Estimates from Probit models are similar in sign and magnitude to the main results and indicate reductions in child maltreatment referrals by age three.

Next, we show that our results are not sensitive to changes in sample period or outliers. We drop referrals from 2020–2021 due to the documented declines in child maltreatment reporting and various employment and income shocks that occurred during the COVID-19 pandemic. Our main estimates are nearly identical to those in Table 3 and are shown in Table A8. Moreover, estimates are not sensitive to the omission of households with large numbers of PFD recipients, such as group homes.[16] Screened-out referrals are currently included in our analysis. Although these referrals indicate some level of perceived risk for maltreatment by someone, they are screened out due to not reaching the legal definition instigating an investigation by child welfare in Alaska. When we remove screened-out reports (Table A10), the estimates are slightly larger in magnitude, indicating that an additional $1,000 in lifetime PFD income leads to a 1.3 percentage point reduction in total child maltreatment referrals and a 0.5 percentage point reduction in substantiated reports.

In Figure A2, we provide a figure to show that effects are not driven by very short-run changes in household behavior due to the disbursement date, followed by reversion to the mean. Figure A2 displays the average number of referrals, by month, for our full sample period. Referrals fall in the summer months, and are highest in April and in October, the month of PFD disbursement. This

[16] See Table A9. To test whether estimates are sensitive to omitting group homes, we drop physical addresses that receive 19 or more PFD transfers per year.

implies that PFD disbursement does not itself lead to immediate reductions in child maltreatment.[17]

Moreover, in an effort to exploit birth eligibility cutoffs of the PFD, our empirical approach compares children born in the latter half of the year to children born in the earlier half of the following year. However, it is well-documented that due to the larger financial incentives of timing births in December rather than January, more births occur in the last week of December than in the first week of January.[18] Although above we show that there is little to no change in the composition of births for these two groups, in Table 6 we test the sensitivity of our results to different bandwidth cutoffs, dropping children with birthdays between December 24 and January 8 to account for the discontinuities in children born during the end-of-year holidays. In Column 1, we present results from our baseline sample, comparing children born between July and December to those born between January and June of the following year. In Column 2, we restrict our sample to children with birthdays within 3 months of our December 31 cutoff. We do so given that PFD disbursements are typically released in October, implying that households with children born at the end of the year would have *received* two PFDs by the time their child reaches age 3. Estimates are statistically similar to our baseline results. In Column 3, we consider only children born in December and January. This approach is akin to other papers that similarly use the December 31 cutoff to identify effects, eliminating a donut of observations near the threshold (Rittenhouse, 2023). Results are larger in magnitude to our main estimates. Because estimating local average effects requires a large number of observations near the cutoff, we lose some power in this estimation procedure. As a result, the estimates are less precise for substantiated referrals, but the confidence intervals overlap for these estimates and our baseline estimates.

[17]We have also considered a model that more directly estimates a short-run effect of total referrals and substantiated referrals, based on the date of PFD disbursement, which changes year-to-year. Estimates from this event-study approach indicate no differential effects on referrals in the eight weeks leading up to or six weeks after statewide PFD disbursement, after accounting for year, month, day-of-week fixed effects. This provides further support for the notion that changes in referrals from additional cash transfers early in a child's life are not simply short-lived, but are persistent, echoing the nature of child maltreatment itself. When estimating a local average treatment effect from a regression discontinuity model, using the PFD disbursement as a treatment cutoff, estimates for total referrals are negative and statistically insignificant ($p = 0.40$).

[18]To show this birth bunching at the end of the year, we plot the weekly number of births in our sample relative to the December 31 cutoff in Figure A3.

VII. Further Results: Household Living Conditions

Our results imply that receiving an additional $1,000 from the PFD leads to reductions in contact with the child welfare system, including reductions in allegations of physical abuse and neglect. In this section, we explore other outcomes that could explain these effects. To do so, we use a subsample of the PRAMS cohorts (2009–2018) linked to CUBS, which include interview follow-ups around a child's third birthday. While each proposed explainer described below cannot alone justify the entirety of our findings, each piece can help us better understand how cash transfer payments affect behavior within the household.

VII.1. Within-Household Conditions

We first address whether changes in lifetime PFD amounts can alter household living conditions, including moving frequently, living with the mother at age 3, and changes in the mother's marital status. We do so given the recent evidence that increasing benefit amounts for conditional cash transfers leads to fewer divorces and fewer instances of intimate partner violence (Hsu, 2016; Lindo, Krishna, and Swensen, 2022). More generally, income supports could relax resource constraints that cause undue stress in relationships.

We present estimates for various household living conditions in Table 7 Columns 1–3. In particular, we find that an additional $1,000 implies that the child's birth mother is less likely to have moved since the child's birth.[19] We also find that the child is more likely to still be living with their mother at age three, which suggests that additional cash payments can help to mitigate later enrollment of vulnerable children into foster care or other care arrangements away from their mothers. We do not estimate effects on mother's marital status.[20] Overall, estimates indicate that

[19]CUBS only measures moving within Alaska. Anyone who responded to PRAMS and moved out of Alaska is not included in CUBS. About 20 percent of PRAMS respondents leave the state before their child turns three. We include these respondents in our main analysis, noting that our estimates are not meaningfully impacted by their omission.

[20]We have also analyzed effects on whether a child is more likely to live at home with someone experiencing partner abuse, a substance use problem or mental illness as well as effects on parental incarceration and the introduction of abusive partners; however, estimates are too imprecise to be economically meaningful. We do not have information on whether a child is living with their father.

increases in PFD payments lead to some improvements in family stability.

VII.2. Health and Wellness

Next, we analyze whether the PFD can help families better smooth consumption and increase health care utilization and/or food intake at home. Importantly, child neglect has been shown to be strongly correlated with both inadequate medical care and food insecurity (Kim, Gundersen, and Windsor, 2023). Therefore, we estimate effects on well-child visits and nutritional assistance participation in an attempt to better understand the relationship between PFD payments and neglect.

Column 4 presents estimates for well-child visits. This variable is an indicator variable for whether a child has seen a health care worker for routine medical care, such as a check-up or physical exam in the last year, measured at age 3. Because physicians can be key reporters for neglect and physical abuse, any changes in examinations due to changes in household income may also lead to changes in reporting of maltreatment. Importantly, the baseline is relatively high, with 88 percent of children in our linked CUBS sample receiving a well-child visit in the last year. We find no evidence that marginal increases in the PFD change health care take-up, and we can rule out increases of more than 2.5 percent.

Above we show that cash assistance leads to fewer cases of neglect, which may be partially due to families having more money to purchase food. However, one offsetting effect of higher PFD receipt may be if additional cash transfers lead to families being less likely to use food-related safety net programs. Based on linked PRAMS and CUBS data, nearly half of children have participated in the nutritional assistance program, Women, Infants, and Children (WIC) by age 3. In Table 7 Column 5 we show that larger PFD payments lead to a no changes in children participating in food-related programs, including WIC, Supplemental Nutritional Assistance Program (SNAP), the National School Lunch Program, and local food pantries. Based on our estimates, we can rule out relatively large effects on program participation, ranging from -5.4 to 6.3 percent.[21] Therefore, any

[21]We note that we see a small decline in WIC enrollment at age three (1.9 percentage points, $p < 0.1$), although we find no systematic changes in enrollment for the federally funded program, SNAP, or food pantry usage. This may be unsurprising for two reasons. First, WIC in Alaska considers PFD payments for means-testing, while the Alaska SNAP office does not. Second, WIC is a more restrictive program than SNAP with information barriers on what items

changes in neglect are not simply mechanically related to changes in food security.

VII.3. Childcare Arrangements

Finally, because increases in PFD amounts could affect labor force participation decisions as well as childcare decisions, we analyze effects on time spent in daycare and caregiving arrangements. Estimates in Column 6 of Table 7 provide some evidence that the PFD does not change the time spent in daycare. However, we do provide some evidence that the PFD changes childcare arrangements, proxied for by whether a child regularly is cared for by a relative (including the mother) or in a relative's home. Estimates in Column 7 provide some suggestive evidence that an additional $1,000 of PFD increases the likelihood that a child is regularly in childcare at their mother's home with a relative or at a relative's home by 3 percentage points, although the coefficient is not significant at standard levels ($p = 0.17$).

VIII. Discussion and Conclusion

In this paper, we analyze the effects of the Alaska PFD, a universal cash transfer, on child welfare involvement and overall child well-being. We find that transferring an additional $1,000 to families in the early months of a child's life reduces the likelihood that a child is referred to Children's Services by 1.3 percentage points and reduces the probability of child mortality. These effects persist up to age five. We also show that these additional unconditional funds reduce the probability of moving and increase the likelihood that a child will still be living with their mother by age three. As a result, we provide new evidence that unconditional cash payments to families affect child maltreatment and family stability.

Given that the PFD supports fewer than 200,000 children each year, our findings on child physical abuse and mortality suggest that the benefits of sending families an additional $1,000 far outweigh the costs. To put our estimates into context, we find that larger PFD transfers reduce substantiated child maltreatment cases by children aged 0–3 by 50 cases. Based on the CDC

are covered by the program funds, implying that with more household income, individuals are less likely to participate.

calculations estimating that the lifetime costs for each victim of child maltreatment is $210,012, we estimate that the lifetime costs avoided by the additional $1,000 cumulative household income early in a child's life is approximately $15.6 million (Fang, Brown, Florence, and Mercy, 2012). In comparison, providing an additional $1,000 to the treated households in our sample (i.e., about half of the mothers in our PRAMS data) cost approximately $4.5 million.[22] This implies that large, lump-sum transfers may be a more direct and cost-saving way to relieve parental stress or a more efficient way for parents to invest in household resources that benefit the whole family.

Our results have implications for long-run outcomes, such as labor market outcomes, as well. For example, a recent paper using a similar date of birth cutoff strategy shows that a roughly $1,300 transfer in the form of tax refunds for parents when their children are infants increased young adult earnings by 1–2 percent (Barr, Eggleston, and Smith, 2022). Since child maltreatment has been shown to lead to worse economic outcomes in adulthood (Currie and Tekin, 2012; Currie and Spatz Widom, 2010), our results may document an important mechanism by which income transfers during early childhood affect long-run labor market outcomes.

Lastly, we note that our findings have important policy implications for broadening cash transfer programs. Although universal cash programs are relatively costly and may be less efficient at achieving any one particular policy goal, unconditional cash transfer programs are less discriminatory and can create fewer poverty gaps than piecemeal safety net programs (Banerjee, Niehaus, and Suri, 2019). We also note that we show the effects of universal cash transfers in the presence of child tax credits and other means-tested safety net programs. Our results thus speak to the marginal effects of expanding cash transfers without simultaneously reducing support for other services. We note that one limitation is that only individuals living in Alaska are eligible for the PFD, a state that has a relatively small population that receives much government support. Yet, altogether, our findings indicate that cash flows to households early on in a child's life have large benefits for both children and society, suggesting that cash may be one policy lever to reduce child maltreatment and

[22]This is based on the estimate in Panel B of Column 1 in Table 3, showing a 0.53 percentage point (11.5 percent) drop in substantiated cases as a result of a household receiving an additional $1,000 of PFD funds. Approximately 440 children have a substantiated referral before age three. Taking into account the 120-case drop in total number of referrals shown in Table 3 and/or the drop in mortality by age five, the social benefits would be even larger.

child mortality.

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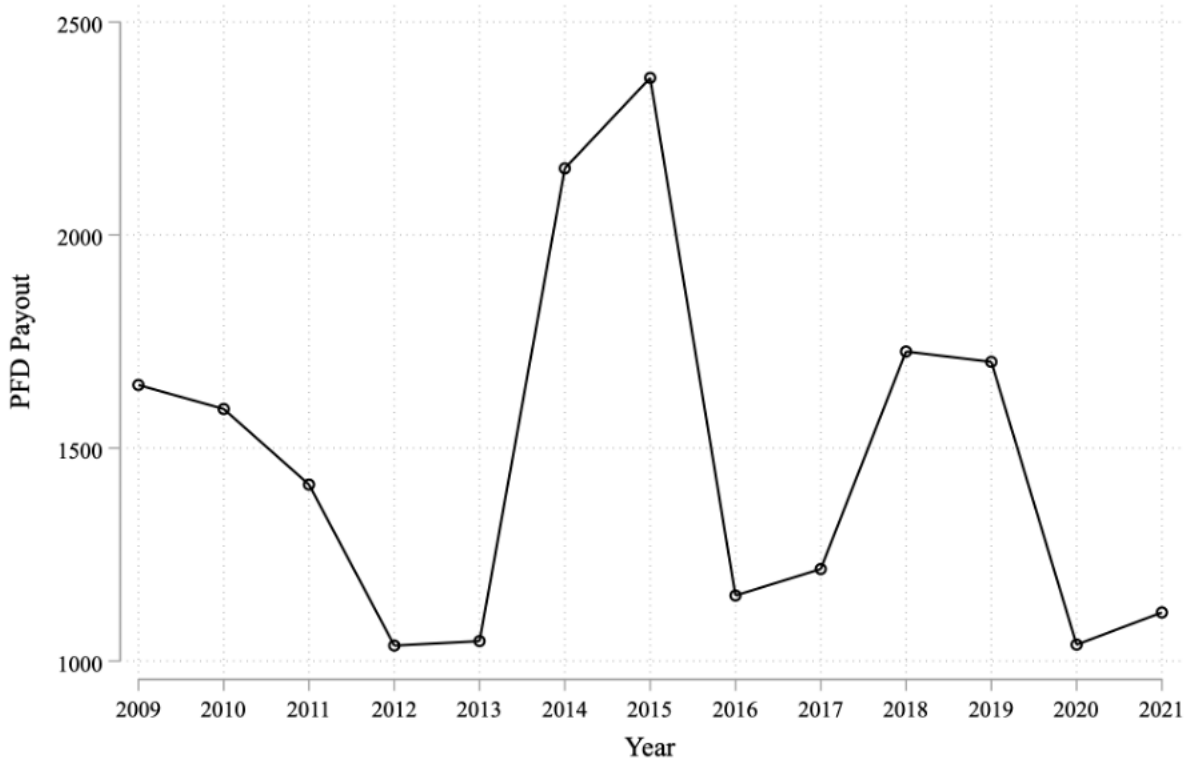
A. Figures and Tables

FIGURE 1 — Alaska PFD Individual Payout by Year



Notes: Data on the individual PFD payout for 2009–2021 is from the Alaska Department of Revenue.

TABLE 1 — Summary Statistics

	Mean	St. Dev.
Unsubstantiated Referrals		
Any	0.157	0.36
Neglect	0.136	0.34
Physical Abuse	0.028	0.16
Parent Perpetrator	0.116	0.32
Non-Parent Perpetrator	0.022	0.15
Substantiated Referrals		
Any	0.046	0.21
Neglect	0.040	0.20
Physical Abuse	0.005	0.07
Parent Perpetrator	0.044	0.21
Non-Parent Perpetrator	0.006	0.07
Died by Age 3	0.001	0.04
PFD Payments		
Child's PFD Amount in Year 1 (in thousands $)	0.284	0.57
Child's PFD Amount in Years 1-2 (in thousands $)	1.514	0.79
Covariates		
Child is First Born	0.366	0.48
Mother Married	0.640	0.48
Mother Education: < HS	0.439	0.50
Mother Education: Some College	0.297	0.46
Mother Insured by Medicaid	0.233	0.42
Mother Uninsured	0.170	0.38
Mother's Age	28.478	5.71
Number of Dependents	3.245	1.73

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all households receiving a PFD during the sample period and all births outside of December 24–January 8. Sample includes PRAMS respondent children linked with household PFD payments during the study period. N = 8,603

TABLE 2 — Balance Test: Means for Treated Vs. Untreated Births

	Month of Birth		
	July-December	January-June	p-value of difference
Child is First Born	0.375	0.356	0.152
Mother Married	0.646	0.630	0.205
Mother Education: < High School	0.436	0.444	0.548
Mother Education: Some College	0.290	0.305	0.223
Mother Insured by Medicaid at Birth	0.232	0.237	0.654
Mother Uninsured	0.166	0.176	0.305
Mother's Age	28.3	28.7	0.027**

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). The sample includes households participating in the ALCANLink that received the PFD during the study period. The first column shows means for babies born in "earlier" birth months of a PFD cohort, i.e. those born before the December 31 eligibility cutoff, which we define as "Treated Births". The second column presents means for untreated infants, i.e. those that are born in the earlier months of the following calendar year, which we define as "Untreated Births". The third column displays p-values for the differences in means. N = 8,603

TABLE 3 — Effect of PFD on Likelihood of a Child Maltreatment Referral by Age 3, by Maltreatment Type

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0111**	-0.0128***	-0.0126***	-0.0142***	-0.0051**	-0.0054***
	(0.0049)	(0.0045)	(0.0046)	(0.0042)	(0.0020)	(0.0020)
Mean	0.157	0.157	0.136	0.136	0.028	0.028
N	8603	8603	8603	8603	8603	8603
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0045*	-0.0053**	-0.0041	-0.0050**	-0.0010	-0.0011
	(0.0026)	(0.0025)	(0.0025)	(0.0024)	(0.0009)	(0.0009)
Mean	0.046	0.046	0.040	0.040	0.005	0.005
N	8603	8603	8603	8603	8603	8603
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses.

* p<0.10, ** p<0.05, *** p<0.01

TABLE 4 — Effect of PFD on Number of Child Maltreatment Referrals by Age 3, by Maltreatment Type

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0954***	-0.0997***	-0.1162***	-0.1225***	-0.1996***	-0.1994***
	(0.0190)	(0.0205)	(0.0227)	(0.0240)	(0.0615)	(0.0640)
Mean	0.551	0.551	0.477	0.477	0.102	0.102
N	3405	2920	3405	2920	3405	2920
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0825	-0.1217**	-0.0798	-0.1283**	-0.0663	-0.2051
	(0.0507)	(0.0549)	(0.0570)	(0.0613)	(0.1675)	(0.1662)
Mean	0.166	0.166	0.147	0.147	0.021	0.021
N	3405	2920	3405	2920	3405	2920
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period and at least one referral to OCS. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. The outcome variable is the number of total child maltreatment referrals to OCS by age three. Robust standard errors are in parentheses.

*p<0.10, **p<0.05, ***p<0.01

TABLE 5 — Effect of PFD on Child Mortality by Age 3 Among the Child Welfare Involved Population

	(1)	(2)
$1,000 Lifetime PFD Amount	-0.0034**	-0.4708***
	(0.0014)	(0.0884)
Mean	0.0026	0.0026
N	2920	2124
Model	OLS	Probit

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on PFD payments from the Alaska Department of Revenue (2009–2021) and child mortality data from the Alaska Office of Children's Services. We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period and were involved with the child welfare system. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Column 1 shows estimates from an OLS model. Column 2 reports estimates from a Probit model. Robust standard errors are in parentheses.
*p<0.10, **p<0.05, ***p<0.01

TABLE 6 — Effect of PFD on Likelihood of a Child Maltreatment Referral by Age 3, Sensitivity Analysis: Testing Birthdate Bandwidths

	(1) Jul.–Jun.	(2) Oct.–Mar	(3) Dec–Jan
	Unsubstantiated Referrals		
$1,000 Lifetime PFD Amount	-0.0128***	-0.0148**	-0.0411***
	(0.0045)	(0.0061)	(0.0134)
Mean	0.157	0.153	0.176
N	8603	4007	1125
	Substantiated Referrals		
$1,000 Lifetime PFD Amount	-0.0053**	-0.0066**	-0.0040
	(0.0025)	(0.0032)	(0.0065)
Mean	0.046	0.044	0.044
N	8603	4007	1125
Controls	Yes	Yes	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses.

* p<0.10, ** p<0.05, *** p<0.01

TABLE 7 — Effect of PFD on Household Living Conditions at Age 3

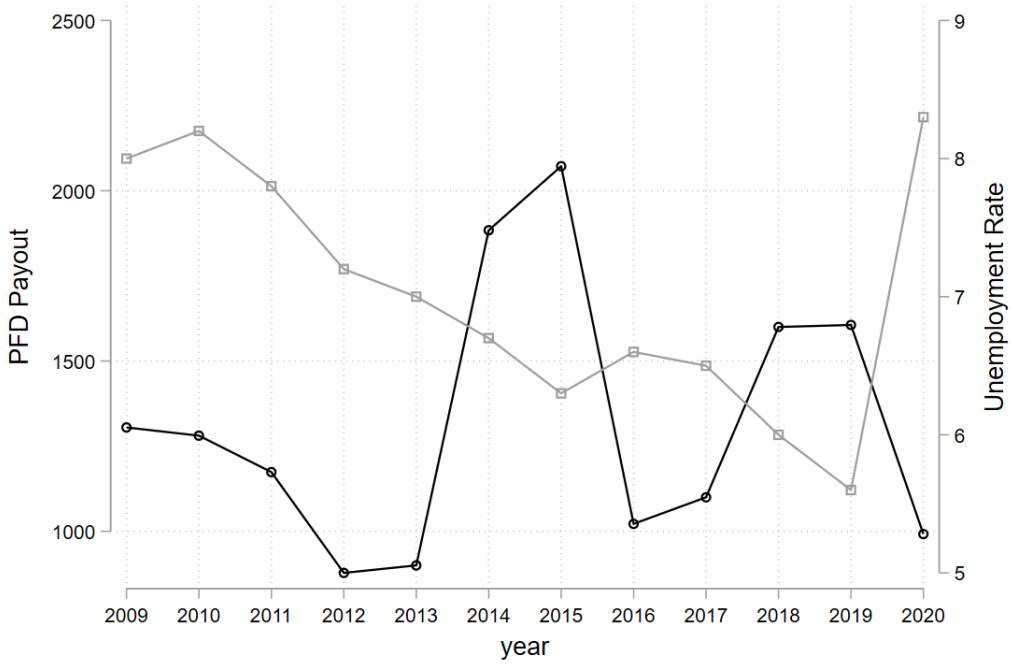
	(1) Living with Mother	(2) Moved Since Child was Born	(3) Mother Marital Status Changed	(4) Well-Child Visits	(5) Food Security	(6) Childcare Center	(7) Relative Caregiving
$1,000 Lifetime PFD Amount	0.0108**	-0.0475***	-0.0001	0.0051	0.0014	0.0097	0.0281
	(0.0043)	(0.0133)	(0.0084)	(0.0089)	(0.0104)	(0.0210)	(0.0209)
Mean	0.979	0.470	0.124	0.880	0.345	0.528	0.475
N	4249	4245	4227	4143	4237	1891	1429

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on PFD payments from the Alaska Department of Revenue (2009–2021), and the Alaska Childhood Understanding Behaviors Survey (CUBS) Cohorts 2012–2021. We include all births outside of December 24–January 8. Regressions are weighted by sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Columns 1–3 presents estimates for the listed family stability variables. Column 4 presents estimates for whether a saw a health care worker for routine medical care within the last year. Column 5 presents estimates for a variable measuring whether a child had any nutritional assistance participation in the last three months, including WIC, SNAP, food pantry usage, or participation in the National School Lunch Program. Column 6 presents estimates for whether a child was cared for regularly in a childcare center. Column 7 presents estimates for whether a child was regularly cared for in a relative's home and/or by a relative. Robust standard errors are in parentheses.
*p<0.10, **p<0.05, ***p<0.01

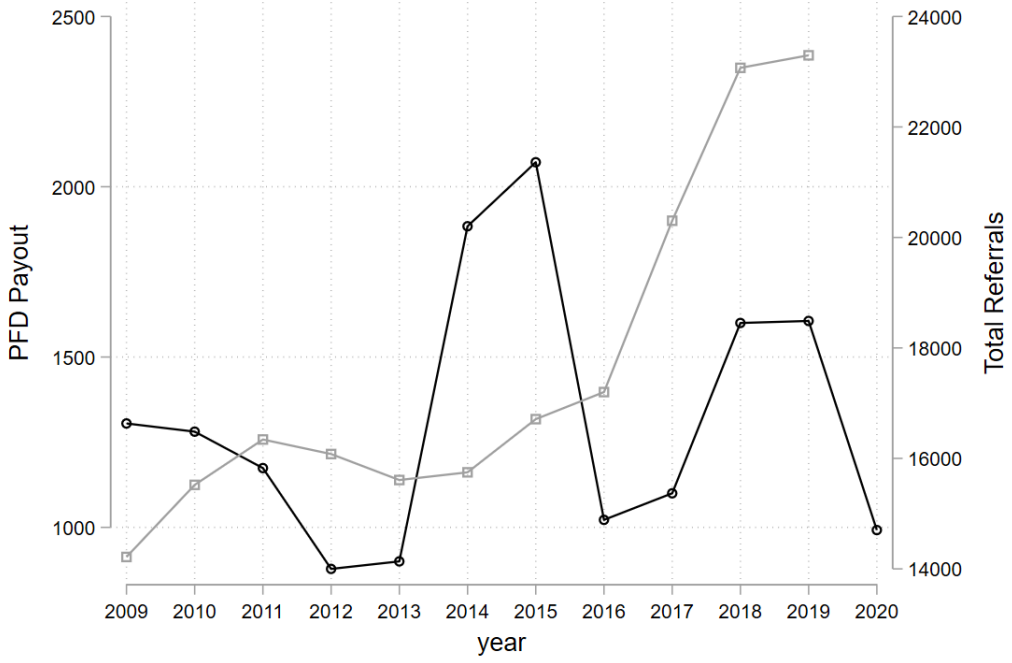
Appendix

FIGURE A1 — Alaska PFD Individual Payout by Year and Total Referrals

Panel A. PFD Payments and Unemployment Rate

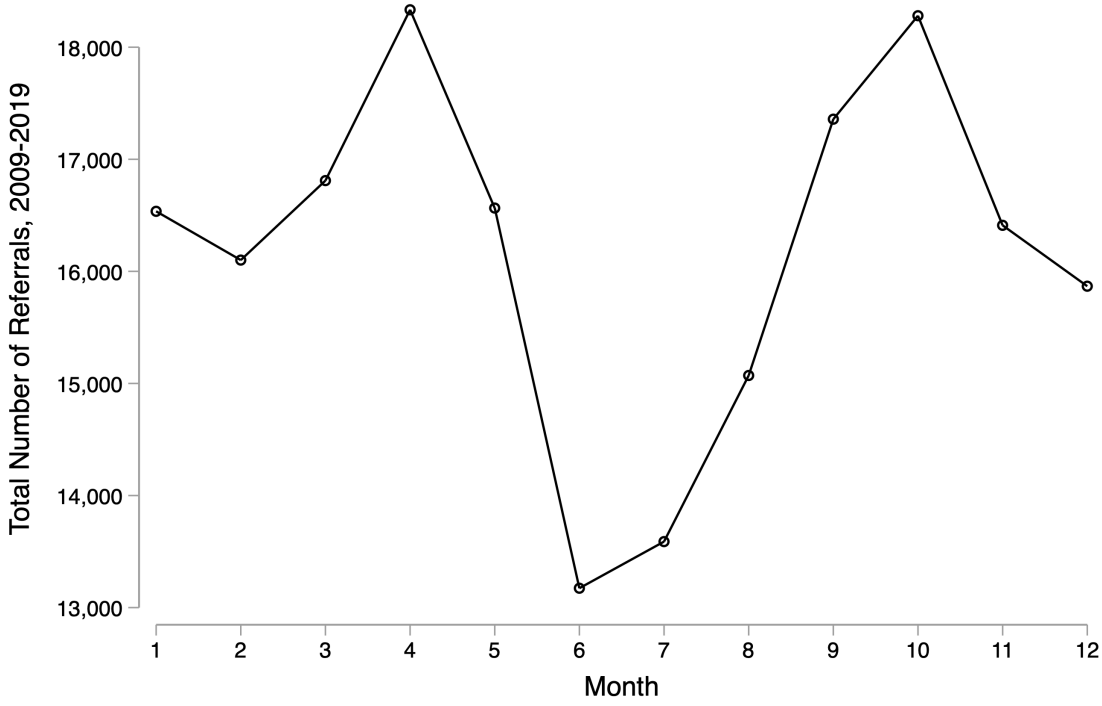


Panel B. PFD Payments and Total Child Maltreatment Referrals



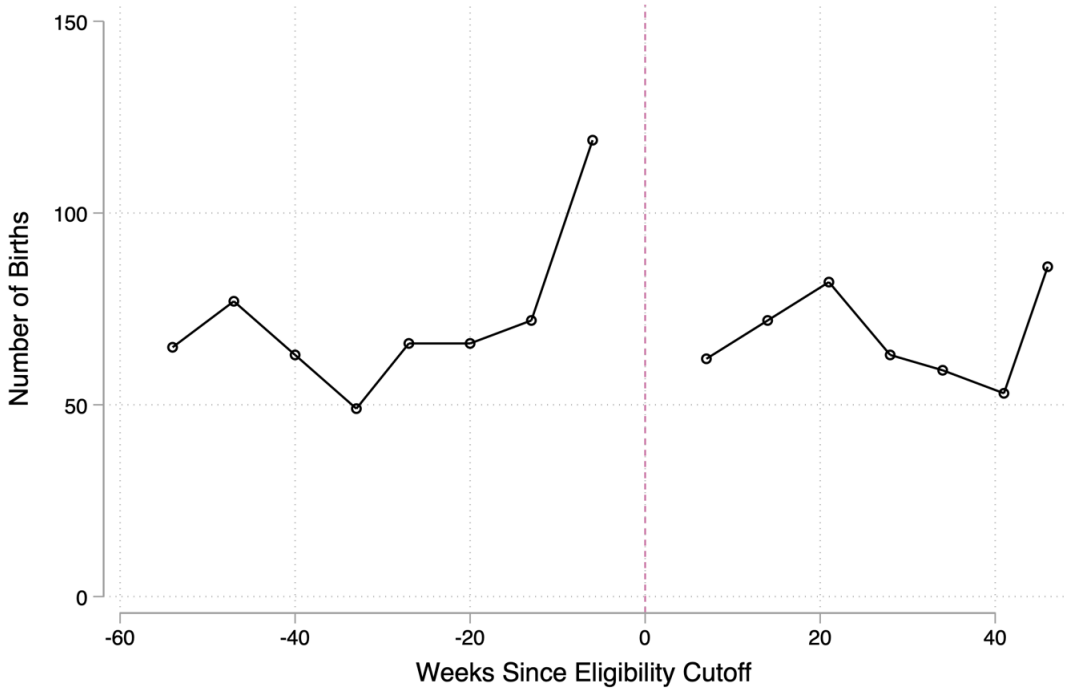
Notes: Author's calculations of the annual individual PFD payout for 2009–2021 from the Alaska Department of Revenue and total number of referrals by year using data from the Alaska Office of Children's Services (OCS) from 2009 to 2019. The top panel presents time series plots for the Alaska unemployment rate and the Alaska yearly PFD payment while the bottom panel presents time series plots for the total number of OCS referrals and the Alaska yearly PFD payment. The black line plots annual PFD payments; the gray line plots the unemployment rate (top panel) and the total number of OCS referrals (bottom panel).

FIGURE A2 — Monthly Trends in Total Referrals



Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). The figure plots average child maltreatment referrals to the Alaska OCS office, by month.

FIGURE A3 — Weekly Birth Counts in Alaska



Notes: Author's calculations on weekly counts of births based on natality data from ALCANLink (PRAMS Birth Cohorts 2009-2017).

TABLE A1 — Balance Test: Mother and Infant Descriptives, Using Natality Data

			Earlier vs. Later Births		
	Mean	Std. dev.	Jul-Dec	Jan-Jun	Difference
	(1)	(2)	(3)	(4)	(5)
Age (years)	28.20	5.98	28.22	28.18	-0.040***
Black	0.14	0.35	0.14	0.14	-0.004***
Married	0.60	0.49	0.60	0.60	0.006***
Medicaid	0.38	0.49	0.39	0.38	-0.008***
Number Prenatal Visits	13.70	15.01	13.68	13.72	0.040***
Male	0.51	0.50	0.51	0.51	0.001***
APGAR Score	4.97	0.29	4.97	4.97	-0.001***
Birthweight in Grams	3273.15	628.68	3271.72	3274.67	2.948***
Low Birthweight	0.08	0.27	0.08	0.08	0.000**

Notes: Publicly available natality data for the state of Alaska is from the CDC Wonder database. Descriptive statistics include the means and standard deviations for the listed outcomes for all mothers and infants born between 2009–2019. Columns (1) and (2) present means and standard errors for all births, respectively, while Columns (3) and (4) present means for infants born between July 1–December 31 and January 1–June 30 separately. In Column (5), we provide the difference in means of the respective variable between these two groups, according to a two-sample t test.

TABLE A2 — Effect of PFD on Likelihood of Unsubstantiated Child Maltreatment Referrals, Other Ages

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Probability of Having a Child Maltreatment Referral by Age 1					
$1,000 Lifetime PFD Amount	-0.0033	-0.0015	-0.0073	-0.0057	0.0002	0.0003
	(0.0058)	(0.0055)	(0.0054)	(0.0052)	(0.0021)	(0.0020)
Mean	0.077	0.077	0.069	0.069	0.008	0.008
N	8603	8603	8603	8603	8603	8603
	Probability of Having a Child Maltreatment Referral by Age 2					
$1,000 Lifetime PFD Amount	-0.0142**	-0.0121**	-0.0142***	-0.0123**	-0.0036	-0.0033
	(0.0057)	(0.0053)	(0.0054)	(0.0050)	(0.0022)	(0.0022)
Mean	0.122	0.122	0.106	0.106	0.018	0.018
N	8603	8603	8603	8603	8603	8603
	Probability of Having a Child Maltreatment Referral by Age 4					
$1,000 Lifetime PFD Amount	0.0014	-0.0039	-0.0013	-0.0063*	-0.0037*	-0.0047**
	(0.0041)	(0.0038)	(0.0039)	(0.0036)	(0.0021)	(0.0020)
Mean	0.191	0.191	0.165	0.165	0.039	0.039
N	7829	7829	7829	7829	7829	7829
	Probability of Having a Child Maltreatment Referral by Age 5					
$1,000 Lifetime PFD Amount	0.0077**	0.0005	0.0045	-0.0022	0.0005	-0.0011
	(0.0034)	(0.0032)	(0.0032)	(0.0030)	(0.0016)	(0.0016)
Mean	0.215	0.215	0.186	0.186	0.047	0.047
N	7032	7032	7032	7032	7032	7032
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. The top, middle, and bottom panels present estimates for the likelihood of receiving an unsubstantiated child maltreatment referral by ages two, four, and five, respectively. Robust standard errors are in parentheses.
*p<0.10, **p<0.05, ***p<0.01

TABLE A3 — Effect of PFD on Likelihood of Substantiated Child Maltreatment Referrals, Other Ages

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Probability of Having a Child Maltreatment Referral by Age 1					
$1,000 Lifetime PFD Amount	-0.0027	-0.0021	-0.0014	-0.0009	-0.0005	-0.0004
	(0.0027)	(0.0026)	(0.0026)	(0.0025)	(0.0009)	(0.0009)
Mean	0.021	0.021	0.018	0.018	0.002	0.002
N	8603	8603	8603	8603	8603	8603
	Probability of Having a Child Maltreatment Referral by Age 2					
$1,000 Lifetime PFD Amount	-0.0055*	-0.0049*	-0.0047*	-0.0042	-0.0019*	-0.0018*
	(0.0029)	(0.0028)	(0.0028)	(0.0027)	(0.0011)	(0.0011)
Mean	0.036	0.036	0.031	0.031	0.004	0.004
N	8603	8603	8603	8603	8603	8603
	Probability of Having a Child Maltreatment Referral by Age 4					
$1,000 Lifetime PFD Amount	-0.0028	-0.0053**	-0.0025	-0.0051**	0.0003	0.0001
	(0.0022)	(0.0022)	(0.0021)	(0.0021)	(0.0007)	(0.0007)
Mean	0.056	0.056	0.050	0.050	0.007	0.007
N	7829	7829	7829	7829	7829	7829
	Probability of Having a Child Maltreatment Referral by Age 5					
$1,000 Lifetime PFD Amount	0.0001	-0.0033*	0.0002	-0.0031*	0.0007	0.0003
	(0.0018)	(0.0017)	(0.0017)	(0.0016)	(0.0006)	(0.0006)
Mean	0.067	0.067	0.058	0.058	0.010	0.010
N	7032	7032	7032	7032	7032	7032
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all-cause child mortality reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects. Controls include whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. The top, middle, and bottom panels present estimates for the likelihood of receiving a substantiated child maltreatment referral by ages two, four, and five, respectively. Robust standard errors are in parentheses.
*p<0.10, **p<0.05, ***p<0.01

TABLE A4 — Effect of PFD on Likelihood of Child Maltreatment Referrals by Age 3, by Response Time and Perpetrator

	(1) High Priority	(2) Other Priority	(3) Parent Perpetrator	(4) Non-Parent Perpetrator
	Unsubstantiated Referrals			
$1,000 Lifetime PFD Amount	-0.0080***	-0.0110***	-0.0141***	-0.0019
	(0.0025)	(0.0039)	(0.0040)	(0.0020)
Mean	0.033	0.106	0.116	0.022
N	8603	8603	8603	8603
	Substantiated Referrals			
$1,000 Lifetime PFD Amount	-0.0032*	-0.0027	-0.0054**	-0.0006
	(0.0018)	(0.0020)	(0.0025)	(0.0008)
Mean	0.022	0.029	0.044	0.006
N	8603	8603	8603	8603
Controls	Yes	Yes	Yes	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects. Controls include whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. "High Priority" refers to calls that require a response within 24 hours. Robust standard errors are in parentheses.
p<0.10, ** p<0.05, *** p<0.01

TABLE A5 — Effect of PFD on Likelihood of Child Maltreatment Referrals by Age 3, by Mother Characteristics

	(1) Unmarried	(2) Married	(3) Less than HS	(4) HS Graduate	(5) Under Age 24	(6) 24 or Older
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0293***	-0.0080*	-0.0195**	-0.0036	-0.0210	-0.0074
	(0.0106)	(0.0048)	(0.0095)	(0.0042)	(0.0136)	(0.0048)
Mean	0.300	0.077	0.264	0.073	0.281	0.124
N	3500	5103	4017	4586	1872	6731
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0084	-0.0046*	-0.0076	-0.0014	0.0001	-0.0054*
	(0.0060)	(0.0025)	(0.0057)	(0.0016)	(0.0062)	(0.0028)
Mean	0.098	0.016	0.086	0.014	0.065	0.040
N	3500	5103	4017	4586	1872	6731
Controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects. Controls include whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Columns 1 and 2 show effects for unmarried and married mothers, respectively. Columns 3 and 4 separately estimate effects by mother's highest education obtained (i.e., less than a high school degree or above high school education). Columns 5 and 6 display effects for women under the age of 24 and women 24 and older, respectively. Robust standard errors are in parentheses.
p<0.10, ** p<0.05, *** p<0.01

TABLE A6 — Effect of PFD on Likelihood of a Child Maltreatment Referral by Age 3, by PFD Year

	(1) Unsubstantiated Referrals	(2) Substantiated Referrals
	July 2009-June 2010 Births (2010 PFD: $1,281)	
$1,000 Lifetime PFD Amount	-0.0256	-0.0170
	(0.0195)	(0.0140)
Mean	0.149	0.053
N	858	858
	July 2010-June 2011 Births (2011 PFD: $1,174)	
$1,000 Lifetime PFD Amount	-0.0062	-0.0152*
	(0.0133)	(0.0088)
Mean	0.167	0.038
N	575	575
	July 2011-June 2012 Births (2012 PFD: $878)	
$1,000 Lifetime PFD Amount	-0.0136	0.0072
	(0.0104)	(0.0045)
Mean	0.142	0.034
N	999	999
	July 2012-June 2013 Births (2013 PFD: $900)	
$1,000 Lifetime PFD Amount	-0.0015	-0.0038
	(0.0111)	(0.0059)
Mean	0.176	0.049
N	958	958
	July 2013-June 2014 Births (2014 PFD: $1,884)	
$1,000 Lifetime PFD Amount	-0.0240*	-0.0029
	(0.0134)	(0.0082)
Mean	0.175	0.063
N	937	937
	July 2014-June 2015 Births (2015 PFD: $2,072)	
$1,000 Lifetime PFD Amount	-0.0208	-0.0100
	(0.0147)	(0.0090)
Mean	0.179	0.056
N	915	915
	July 2015-June 2016 Births (2016 PFD: $1,022)	
$1,000 Lifetime PFD Amount	-0.0164	-0.0052
	(0.0142)	(0.0062)
Mean	0.184	0.040
N	851	851
	July 2016-June 2017 Births (2017 PFD: $1,100)	
$1,000 Lifetime PFD Amount	-0.0119	-0.0084
	(0.0172)	(0.0100)
Mean	0.191	0.065
N	781	781
	July 2017-June 2018 Births (2018 PFD: $1,600)	
$1,000 Lifetime PFD Amount	0.0047	-0.0013
	(0.0211)	(0.0097)
Mean	0.157	0.042
N	374	374
Controls	Yes	Yes

Source: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Coefficients are from estimating Equation (1) and are weighted by PRAMS sampling weights. Controls include whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

TABLE A7 — Effect of PFD on Likelihood of a Child Maltreatment Referral by Age 3, Probit

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0399**	-0.0601***	-0.0503***	-0.0731***	-0.0749***	-0.0857***
	(0.0187)	(0.0226)	(0.0192)	(0.0232)	(0.0285)	(0.0327)
Mean	0.551	0.551	0.477	0.477	0.102	0.102
N	9625	8603	9625	8603	9625	8603
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0248	-0.0652**	-0.0228	-0.0665*	-0.0181	-0.0786
	(0.0250)	(0.0318)	(0.0268)	(0.0349)	(0.0565)	(0.0622)
Mean	0.166	0.166	0.147	0.147	0.021	0.021
N	9625	8603	9625	8603	9625	8603
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects. Controls include whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses.
*p<0.10, **p<0.05, ***p<0.01

TABLE A8 — Effect of PFD on Likelihood of a Child Maltreatment Referral by Age 3, Sensitivity Analysis: Dropping 2020 or Later

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0104**	-0.0137***	-0.0115**	-0.0146***	-0.0056***	-0.0063***
	(0.0053)	(0.0048)	(0.0050)	(0.0046)	(0.0021)	(0.0021)
Mean	0.154	0.154	0.135	0.135	0.025	0.025
N	7032	7032	7032	7032	7032	7032
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0042	-0.0058**	-0.0037	-0.0054**	-0.0006	-0.0006
	(0.0028)	(0.0028)	(0.0027)	(0.0027)	(0.0009)	(0.0009)
Mean	0.046	0.046	0.040	0.040	0.005	0.005
N	7032	7032	7032	7032	7032	7032
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses.

*p<0.10, **p<0.05, ***p<0.01

TABLE A9 — Effect of PFD on Likelihood of an Unsubstantiated Child Maltreatment Referral by Age 3, Sensitivity Analysis: Dropping Top 1% of PFD Address Receivers

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0262***	-0.0189***	-0.0271***	-0.0208***	-0.0047*	-0.0034
	(0.0067)	(0.0062)	(0.0063)	(0.0058)	(0.0025)	(0.0024)
Mean	0.149	0.149	0.128	0.128	0.026	0.026
N	6385	6385	6385	6385	6385	6385
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0110***	-0.0083**	-0.0101***	-0.0077**	-0.0008	-0.0004
	(0.0039)	(0.0037)	(0.0038)	(0.0037)	(0.0009)	(0.0009)
Mean	0.044	0.044	0.038	0.038	0.005	0.005
N	6385	6385	6385	6385	6385	6385
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample limited to households that have received the PFD during the study period. We omit the top one percent of PFD receivers. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses

*p<0.10, **p<0.05, ***p<0.01

TABLE A10 — Effect of PFD on Likelihood of a Child Maltreatment Referral by Age 3, Sensitivity Analysis: Dropping Screened Out Reports

	(1) Total	(2) Total	(3) Neglect	(4) Neglect	(5) Physical	(6) Physical
	Unsubstantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0132***	-0.0146***	-0.0131***	-0.0144***	-0.0048***	-0.0050***
	(0.0044)	(0.0041)	(0.0041)	(0.0039)	(0.0018)	(0.0018)
Mean	0.120	0.120	0.103	0.103	0.020	0.020
N	8603	8603	8603	8603	8603	8603
	Substantiated Referrals					
$1,000 Lifetime PFD Amount	-0.0045*	-0.0053**	-0.0041	-0.0050**	-0.0010	-0.0011
	(0.0026)	(0.0025)	(0.0025)	(0.0024)	(0.0009)	(0.0009)
Mean	0.046	0.046	0.040	0.040	0.005	0.005
N	8603	8603	8603	8603	8603	8603
Controls	No	Yes	No	Yes	No	Yes

Notes: Data is from PRAMS Birth Cohorts 2009–2018, linked with administrative data on all child maltreatment reports from the Alaska Office of Children's Services (2009–2021) and data on PFD payments from the Alaska Department of Revenue (2009–2021). We include all births outside of December 24–January 8. The sample is limited to households that have received the PFD during the study period. We omit screened out child maltreatment reports. Regressions are weighted by PRAMS sampling weights and adjust for PFD cohort fixed effects and the following child/mother-level demographics: whether the focal child is the mother's first live birth, maternal marital status at birth, mother's education level at birth, mother's insurance status at birth, mother's age at birth, and number of people dependent upon income at birth. Robust standard errors are in parentheses.
*p<0.10, **p<0.05, ***p<0.01