



## RESEARCH BRIEF # 33

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### Child Injuries and the Timing of SNAP Benefits Receipt

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Injuries are the leading cause of mortality and morbidity for children in the United States. Each year, these injuries result in 9.2 million emergency department visits and cost \$17 billion.<sup>1</sup> Prior research shows that injuries are more likely among children in low-income households because poverty is a risk factor for experiencing childhood injuries.<sup>2,3,4</sup> Childhood injuries are also associated with child behavior problems<sup>5</sup> and changes in parenting behavior including reduced supervision, rule enforcement, and adherence to daily routines as well as increased maternal fatigue.<sup>6-11</sup> Food insecurity, or inconsistent access to food through socially acceptable ways, likely creates situations that increase the risk of childhood injuries.<sup>12,13</sup>

The Supplemental Nutrition Assistance Program (SNAP) is a federal nutrition program that provides food assistance to low-income households through vouchers to purchase food products, seeds, and plants that grow food. In 2016, SNAP helped provide food to 18 million (1 in 4) American children.<sup>14</sup> Nearly half of American children live in a household that receives SNAP at some point in their childhood.<sup>12,15</sup> Although SNAP is a federal government program, state governments are given flexibility on when monthly benefits are provided to recipients. Currently, only one state issues SNAP benefits to all recipients on a single day. All other states issue benefits over multiple days. Most often, states issue SNAP benefits in 10 days or less, but 7 states have issuance periods longer than 10 days.

SNAP has been shown to improve childhood outcomes;<sup>16</sup> however, SNAP benefits are often used up before the end of the month, making it difficult for families to consistently meet their everyday food needs.<sup>17-20</sup> A majority of households (60%) use all of their SNAP benefits within the first week of receipt, and nearly all households (91%) use them within the first 3 weeks following receipt. There is a link between the distribution timing of SNAP benefits and food insecurity. Households that receive SNAP benefits early in the month are more likely to decrease food spending at the end of the month, as compared to households that receive their benefits later in the month.<sup>21</sup> Additionally, the timing of monthly SNAP benefit receipt has been linked to children's test scores and negative behavior.<sup>22-24</sup>

#### KEY FINDINGS

- Households that receive SNAP benefits later in the calendar month have a lower likelihood of going to the emergency room for a childhood injury at the end of the month.
- The week before households receive their SNAP benefits, when food stores at home may be low, is associated with a higher likelihood of going to the emergency room for childhood injuries.
- The timing of food assistance receipt may alter parenting and child behaviors associated with childhood injuries as anxiety about the availability of food changes over the month.

This brief summarizes the results of a recent study published in *BMC Pediatrics*.<sup>25</sup> The study examined the

connection between food insecurity and injury-related emergency room (ER) visits for children under 5 years old in Missouri. Missouri is one of the few states with a SNAP issuance period lasting longer than 10 days and is the only state that issues SNAP benefits between the 1<sup>st</sup> and the 22<sup>nd</sup> day of the month. Each household receives their benefits on the same day each month based on the individual case head’s birth month and the first letter of their last name. Therefore, Missouri is a perfect state to study the impacts of benefit timing within a calendar month.

### SNAP Timing Matters

This study found that households which received their SNAP benefits in the third week of the calendar month were less likely to have childhood injury ER visits in the last week of the month (Figure 1). This finding suggests that issuing SNAP benefits later in the calendar month might protect children from injuries at the end of the month by reducing food insecurity and household stress.

This study considered the beginning of the SNAP benefit month as the first day of SNAP receipt regardless of whether that day falls on the 3<sup>rd</sup> or the 15<sup>th</sup> of the calendar month. Given this, the results of the study show that the week before SNAP benefits are received is the week with the greatest likelihood of ER claims for childhood injuries (Figure 2).

Together, these two findings suggest that receiving SNAP payments closer to the end of the calendar month decreases the likelihood of ER child-injury visits by reducing parental and child behavior changes and anxiety related to food insecurity. Because other resources like Temporary Assistance for Needy Families (TANF) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) are distributed on a single day early in the month, SNAP benefits received at the end of the month can be particularly helpful in putting food on the table at a time when income and additional resources have run out or run low.

### Policymakers Can Support Childhood Health by Supporting SNAP

Food insecurity increases parental stress and makes positive parenting harder. Specifically, food insecurity has been linked to changes in parental behaviors such as lower levels of rule enforcement, increased maternal fatigue, and reduced supervision and adherence to daily routines.<sup>6-11</sup>

These changes in parental behavior increase the likelihood of child injuries.<sup>6,23</sup> Our findings document another potential benefit of participation in the SNAP program for families with young children as well as how SNAP can reduce public healthcare costs by contributing to child health.

Figure 1- Impact of SNAP Receipt in the 3<sup>rd</sup> Week of Calendar Month

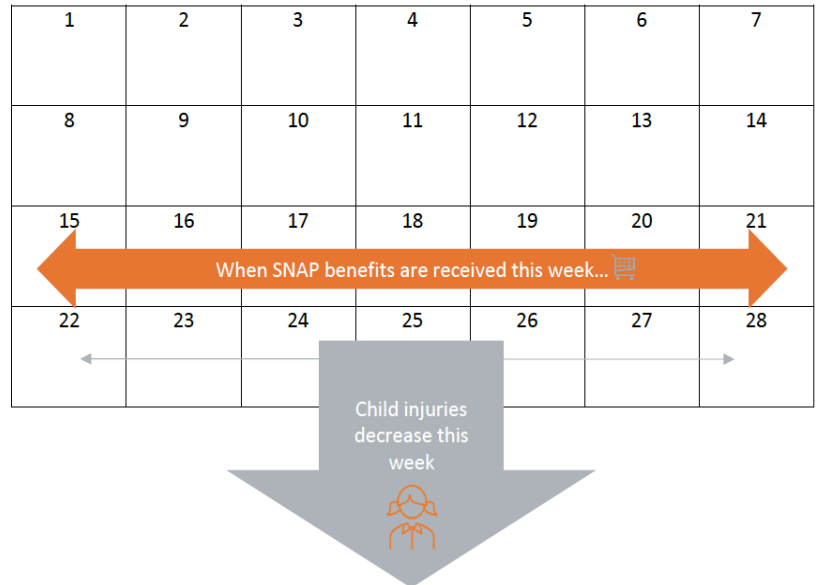
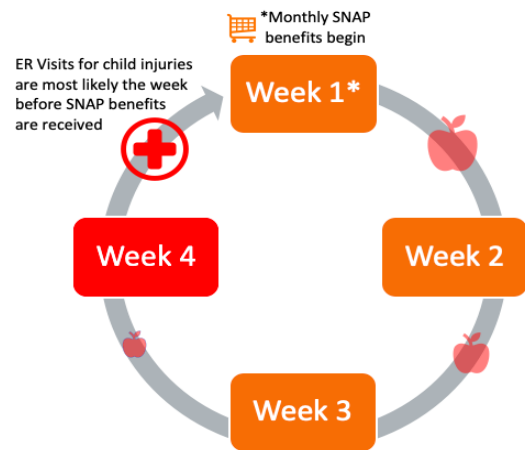


Figure 2- Child Injuries at the End Monthly SNAP Cycle



## Data and Methods

This study analyzed Missouri state administrative data from the Department of Social Services for SNAP program services linked to Medicaid claims data for children ages 0 to 5 from January 2010 to December 2013. This amounted to 1,288,552 emergency care Medicaid claims, of which 260,907 were injury-related conditions identified by International Classification of Disease, Ninth Revision (ICD-9) diagnosis codes 800-999. The relationship between SNAP issuance date and Medicaid ER claims for childhood injuries was examined by creating both a standardized 28-day calendar month, and a standardized 28-day SNAP benefit month with the SNAP benefit month beginning on the first day on SNAP receipt. For additional information on the methodology, please see the published study, [Childhood injuries and food stamp benefits: an examination of administrative data in one US state](#).

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