

# How Incarceration Affects the Health of Communities and Families

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Emerging evidence suggests that negative health consequences of incarceration are felt not only by those who have experienced it but also by their families and individuals in their communities. This article reviews the evidence of health effects of incarceration in communities and family members.

The negative health consequences of incarceration for individuals who have experienced it are well documented [1]; however, emerging evidence suggests that mass imprisonment affects population health more broadly [2], including negative health consequences for family and household members of those incarcerated. Recent national estimates from the Family History of Incarceration Survey estimate that 45% of Americans have ever had an immediate family member incarcerated in jail or prison, including 42% of Whites, 48% of Hispanics, and 63% of Blacks [3]. Approximately 8% of children in the United States have experienced parental incarceration [4], with 25% of Black children experiencing parental incarceration by age 14 [5]. Because incarceration is a normative experience for some groups in the United States, it is a public health priority to understand how it affects people who were not themselves incarcerated, but who had a family member who was.

There are multiple pathways through which incarceration can affect family members, including strain and stress associated with the incarceration as well as stigma. Prior to becoming incarcerated, the individual may have supported others through monetary and/or non-monetary means—child care, household management, etc. Loss of these resources can be costly, potentially resulting in economic destabilization of the individual's family. Family resources may be further strained because incarceration itself can involve costs, such as court fees, fines, and visitation expenses. High incarceration rates may also have detrimental effects on communities due to factors such as a loss of working-age adults in the community, increased exposure to infectious diseases, and shifting public resources from health and social supports to the penal system. This article reviews the evidence of health effects of incarceration for communities and family members.

## Communities

Community characteristics such as feeling safe, trusting one's neighbors, and having access to resources are important determinants of health and well-being. Incarceration disproportionately affects disadvantaged communities and communities with a predominantly Black population. There is little evidence to support that the dramatic increase in incarceration rates has improved the safety of the individuals who live in the community [6]; because incarceration affects parent- and working-age adults from disadvantaged communities, loss of these individuals to incarceration can exact an economic toll and disrupt social ties within their communities.

High community-level incarceration rates affect the children from those communities. In North Carolina, higher county-level incarceration rates increased child poverty rates, particularly in counties with a high proportion of non-White residents [7]. For children, high neighborhood incarceration rates were linked to worse cognitive outcomes in reading comprehension, math problem solving, and memory- and attention-related tasks [8].

Negative health consequences of high community-level incarceration rates in adults have been observed, including impacts on sexual health, cardiometabolic and lung health, and mental/behavioral health. One of the most well studied effects of community-level incarceration is increased risk of contracting a sexually transmitted infection (STI), including HIV/AIDS [9]. This effect is particularly salient for Black women, partly due to the increased exposure of men to STIs while incarcerated and the smaller sexual partner network that results from removing men from the community for incarceration [9]. Incarceration also impacts cardiometabolic and lung health at the community level. For example, non-incarcerated Black individuals in Atlanta, Georgia who lived in neighborhoods with high incarceration rates had

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worse cardiometabolic health profiles, even after controlling for neighborhood crime and poverty and other factors [10]. In New York City, asthma was more prevalent in neighborhoods with higher incarceration rates [11]. High community-level incarceration rates have also been associated with poor mental health outcomes. Evidence from Detroit found that individuals living in neighborhoods with high, relative to low, prison admission rates were more likely to meet criteria for major depressive disorder and generalized anxiety disorder [12]. Together, the mounting evidence suggests that individuals living in communities where a relatively high percentage of the population has experienced incarceration may experience detrimental health consequences.

### Children of Incarcerated Parents

Pathways by which parental incarceration may affect child development include separation, reduced family material resources, additional conflict between caregivers, stigma, and shame [13, 14]. A recent review of the literature highlighted findings indicating that men with incarceration histories gave 25% less in financial contributions to the mothers of their children than similar men who had not been incarcerated; moreover, post-release wages of men were reduced by 10%-20% [15]. This loss of income is often coupled with increased costs associated with incarceration (eg, court fees, fines, visitation costs) and ultimately families with an incarcerated household member are more likely to receive welfare benefits, have unstable housing, and experience more material hardship [15]. Paternal incarceration has also been identified as a contributor to children experiencing food insecurity [16] and homelessness [17].

A systematic review of literature published between 2000 and 2017 found negative effects of parental incarceration across a variety of domains [18]. These consequences were seen as early as the prenatal period, including initiating prenatal care later in the pregnancy, fewer prenatal visits, and a higher chance of the mother experiencing partner abuse and stressors that could harm fetal health. Analysis of the Pregnancy Risk Assessment Monitoring System (PRAMS; 1990-2003), found a 30% increase in the odds of mortality for infants of recently incarcerated fathers who were not abusive, relative to other infants [18, 19]. States with higher levels of prison rates also had higher infant mortality rates [19].

Parental incarceration is associated with harmful effects on childhood cognitive, mental, and behavioral health. For instance, residential parental incarceration was associated with learning disabilities, attention problems, behavioral or conduct problems, developmental delays, and speech or language problems [20]. Also, the incarceration of a father has been associated with aggressive and problematic behaviors in childhood and with internalizing and externalizing problems during the teenage years [18]. The effects of maternal incarceration on child mental health are less well estab-

lished, with the two published studies showing contrasting findings. While one study found no statistically significant effects on 21 measures of behavior and mental health problems, the other found that maternal incarceration was more detrimental than paternal incarceration, particularly for depression risk [18].

For young adults, emerging evidence suggests that parental incarceration is a risk factor for forgoing health care, engaging in risky behaviors (eg, prescription drug misuse, having many sexual partners) [21], and worse health outcomes (eg, high cholesterol, asthma, HIV/AIDS, serious injuries) [22, 23]. Similarly, experiencing parental incarceration is a risk factor for a host of poor outcomes during the transition to adulthood including criminality [24, 25], not completing high school or college [23, 26, 27], early parenthood [28], receiving welfare [23], and lower earnings or income [23, 29].

### Adult Family Members of Incarcerated People

The incarceration of a family member affects several domains of adult health and well-being. Detrimental health effects experienced by adult family members may result from disruptions in household functioning such as separation from—and relationship dissolution between—romantic/sexual partners, co-parents, and/or contributors to household finances and/or management, which can lead women to single parenthood and associated material hardships. Additionally, the family of an incarcerated individual may experience other costs associated with the incarceration and related shame and stigma. Parents of adult children who are imprisoned may become the primary or secondary caregivers for their grandchildren.

According to a recent review, having a family member incarcerated has clear negative physical and mental health effects for women, while the effects on men are less clear [15]. For example, for women but not for men, family member incarceration has been associated with increased risk of obesity, heart attack or stroke, and fair or poor self-reported health [30]. Similarly, family member incarceration is more consistently associated with detrimental mental health effects for women than for men [15]. Qualitative studies have documented heightened stress, depression, and anxiety felt by mothers and/or sexual partners who care for men during and after their incarceration [15]. Quantitatively, both mothers of adult children who are incarcerated and mothers of children with incarcerated fathers experience psychological distress and added financial burdens [15]. Incarceration of a romantic partner has been linked to increased engagement in risky sexual behaviors and risk for contracting an STI [15].

### Conclusions and Future Directions

Societally, the justifications for the use of incarceration center around fair punishment, ensuring public safety, and deterring future crime. Through a public health lens these

rationales imply striving for a public health benefit; however, mounting evidence implies detrimental health effects not only for imprisoned populations, but also family members and communities. To mitigate these effects, a more nuanced understanding of how imprisonment affects health is warranted. Notably, the data infrastructure to study how events observed by the criminal justice system affect the social network of the people involved in it is underdeveloped. Much of the evidence has come from national longitudinal studies that were not specifically designed to study the effects of incarceration on health and therefore lack key information on the timing, type (prison or jail), and length of incarceration. The timing of exposure to a family member's incarceration is important for understanding impacts on developmental processes and health outcomes from infancy throughout the life course. Due to limitations of available data, some populations of policy interest are understudied, such as women and non-heterosexual individuals who have experienced incarceration and their family members. Increasingly, studies are relying on information in linked administrative records, such as corrections to electronic health records, however these records typically do not capture information on the individual's family members or living arrangements. Moreover, administrative health care records do not capture measures of well-being and common debilitating health ailments such as untreated depression or anxiety.

In the United States, emerging evidence suggests that high incarceration rates may directly contribute to poor population-level health and produce health inequalities [31]. It's a public health priority to understand how direct and indirect involvement with the penal system affects population-level health and develop strategies to mitigate the harmful effects. A data infrastructure that integrates information from the criminal justice and medical systems would enable researchers to better document the relationship between penal system involvement and health outcomes and to evaluate interventions and policy changes. To promote population-level health and create systemic changes, a collective effort by policymakers, community members, law enforcement, and leaders from the penal and health care systems will need to consider the research evidence and determine strategies. **NCMJ**

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