LETTER FROM THE EDITORS

We have written Healthy Generations for 15 years. This issue epitomizes the challenges and the rewards of producing this publication. We are always challenged to balance depth with breadth. We often tackle tough topics that are not easily presented in brief articles and we necessarily discard more information than we provide. We also always face a tension between our desire to highlight innovative MCH/public health programs and our need to disseminate evidence-based information. In recent years, we have chosen to profile promising and theoretically sound programs, even if they have not been definitively evaluated.

Producing Healthy Generations also offers many rewards. The most important reward—and the most lasting—is the collaborations we form. In this volume, you will see a rich collection of multidisciplinary authors and interviewees who we have had the pleasure of meeting through our involvement in a Minnesota legislative advisory committee and through an institute we held on the reproductive health of incarcerated women in October 2014 (both are discussed in this volume). Collectively, our many collaborators are sending a message to our readers: it is complicated, and necessary, to provide comprehensive health services to the more than two million incarcerated people in the US. No one involved in this volume has shirked from such complications. Every one of our collaborators—the dedicated legal and criminal justice professionals, as well as the innovative national research experts in the health of incarcerated women—are committed to serving the health needs of incarcerated people. They highlight the importance—and the possibility—of effective criminal justice and public health collaborations to address the health of an extraordinarily vulnerable and largely underserved population.

- Wendy L. Hellerstedt, MPH, PhD, and Sara Benning, MLS

“The idea that some lives matter less is the root of all that’s wrong with the world.”
- Paul Farmer, MD, PhD, Harvard University

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Adult Incarceration in the United States: Prisons and Jails

Every year there are millions of individuals in US jails, prisons, and detention centers. At any one time in the US, about 7 million individuals are under correctional supervision in the US.

The US has about 5% of the world’s citizens and about one-quarter of the world’s prisoners.1 The most socially disenfranchised individuals—and often the most physically and mentally vulnerable people—both engage in criminal activity and have the highest risk for imprisonment.2 Incarceration itself increases social inequalities in education, employment, and health.3 It also affects the social and health status of families, thus contributing to the intergenerational transmission of inequality.4,5

Where Are Individuals Incarcerated in the US?

Most of the incarcerated persons in the US are in federal prisons, state prisons, or jail facilities (Table 1). A small minority of individuals are incarcerated in military prisons, immigration detention facilities, and civil commitment centers. There are also about 2,300 juvenile correctional facilities in the US (housing about 71,000 youth every year). While there are various forms of incarceration—and a variety of individuals who are incarcerated—the focus of this article is on adults who are incarcerated in prisons and jails.

Federal prisons operate at “…five different security levels (i.e., minimum, low, medium, high, administrative). Security levels are distinguished…[by] type of inmate housing…; the presence of external patrols, towers, security barriers, or detection devices; internal security features; and staff-to-inmate ratio.” 5 For example, minimum security facilities, called Federal Prison Camps, have limited security, low staff-to-inmate ratio, and often have dormitory-type housing. High security penitentiaries, on the other hand, have highly secure perimeters (e.g., guarded walls, fences), high staff-to-inmate ratios, and often have single- or multiple-cell dwellings. Administrative facilities have special populations, detaining individuals prior to trial, who are sick and need treatment, violent, or escape-prone. In 2010, the Federal Bureau of Prisons operated 116 facilities that were very crowded (on average, 37% were over capacity).5

State prisons are administered by state Departments of Corrections and are often tiered, like federal prisons, in terms of security level. There are about 1,700 state prisons in the US. States have different numbers of state prisons. In Minnesota, for example, there are 10 adult facilities; the facility in Shakopee is the only one that houses women.

Jail facilities are confinement facilities that are usually administered by a local law enforcement agency. They are intended to confine adults before and after adjudication (although they sometimes hold juveniles). These facilities include jails and city or county correctional centers; special jail facilities, such as medical treatment or release centers; halfway houses; work farms; and temporary holding or lockup facilities. Unlike those in prisons, individuals sentenced to jail facilities usually have sentences of one year or less. There are about 3,300 local jails and 79 Indian Country jails in the US.

How Many US Residents Are Incarcerated?

The rate of incarceration in the US has increased over the last several decades, but may be stabilizing. About 1 in 108 US adults—0.92% of the adult population—are incarcerated in US federal prisons, state prisons, and local jails. In addition to incarcerated individuals, about 1 in 50 US adults are supervised by the criminal justice system through probation or parole.6 Combining those who are incarcerated and those on probation or parole, about 1 in 35 US adults (2.9% of the adult population) are

### Table 1. Characteristics of Incarceration Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Jurisdiction/Administration</th>
<th>Status of Incarcerated Individual</th>
<th>Typical Length of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jail Facility</td>
<td>Local/County</td>
<td>Pre-trial or convicted of a misdemeanor</td>
<td>Less than one year. May be as short as one day.</td>
</tr>
<tr>
<td>State Prison</td>
<td>Individual state Department of Corrections</td>
<td>Convicted of a felony (state law)</td>
<td>More than one year</td>
</tr>
<tr>
<td>Federal Prison</td>
<td>Federal Bureau of Prisons</td>
<td>Convicted of a felony (federal law)</td>
<td>More than one year</td>
</tr>
</tbody>
</table>

under correctional supervision.\textsuperscript{6,7}

**Prisons:** There were 631,168 admissions and 623,337 releases from state and federal prisons in 2013.\textsuperscript{7} Far more individuals are incarcerated in state, compared with federal, prisons (Table 2).

There is a great deal of variation in state prison incarceration rates in the US. The five states that had the highest rates (i.e., at least 600 incarcerated persons/100,000 state residents of all ages) in 2013 were Louisiana, Mississippi, Oklahoma, Alabama, and Texas.\textsuperscript{7}

**Jail facilities:** Estimates of the number of people housed in jail facilities are complex because individuals are incarcerated for less than one year (and some may be housed for only a few days). Some individuals may also be housed more than once in a year (e.g., those with multiple arrests). Thus, while local jail facilities had an average daily population of about 730,000 in mid-year 2013, about 11.7 million persons were housed in jail facilities during the 12-month period ending June 30, 2013.\textsuperscript{8}

### Why Are Adults Incarcerated in US State and Federal Prisons?

Reasons for incarceration vary between state and federal prisons. In 2012 (the most recent data available), 59% of individuals in state prisons were serving sentences for violent offenses, 17% for property offenses, and 12% for drug offenses.\textsuperscript{7} Conversely, 7% of federal prisoners were serving sentences for violent offenses and 51% were serving time for drug offenses (Figure 1). The time served varies by offense. For example, state prisoners serving time for a violent offense were incarcerated for a median of 28 months, compared to 12 months for property offenders and 13 months for drug offenders.\textsuperscript{7}

**Who Is Incarcerated in the US?**

The adult incarcerated population in the US is disproportionately male, young, and non-white:

- 1.2% of adult males in the US were serving sentences in state or federal prisons as of year-end 2013;\textsuperscript{7}
- State and federal prisoners aged 18-44 years accounted for 80% of prison admissions, 77% of releases, and 72% of the year-end population in 2012;\textsuperscript{7}
- Incarceration is prevalent among black Americans—especially men with no college education. Western (2006) suggests that, by middle age, black men in the US are more likely to have been imprisoned than to have graduated from college or joined the military.\textsuperscript{9}

Almost all individuals incarcerated in prisons are 18 years or older, although state prisons housed 1,200 individuals younger than 18 years in adult prison facilities at year-end 2013.\textsuperscript{7} Federal prisons do not house youth in their facilities. Most incarcerated individuals are also US citizens, although federal prisons housed 25,800 people identified as non-citizens at year-end 2013.\textsuperscript{7} States use different definitions of “non-citizen,” making incarceration data from states about citizenship difficult to interpret.

Recidivism is very high, as shown in a report of 404,638 state prisoners from 30 states who were followed from the year of their release (2005) until 2010.\textsuperscript{10}

- 68% of released prisoners were arrested for a new crime within three years and 77% were arrested within five years of release;\textsuperscript{10}
- 37% of those arrested within five years of release were arrested within the first six months of release and 57% were arrested by the end of the first year;\textsuperscript{10}
- Within five years of release, 82% of property offenders, 77% of drug offenders, 74% of public order offenders, and 71% of violent offenders were arrested for a new crime.\textsuperscript{10}

The authors also estimated that 16% of released prisoners were responsible for 48% of the nearly 1.2 million arrests that occurred between 2005 and 2010.\textsuperscript{10}

### Conclusions

Incarcerated individuals are disproportionately male, young, and non-white.\textsuperscript{7,8} They are also very likely to become arrested (and convicted) after release from incarceration.\textsuperscript{10} There are many possible reasons for the high rates of incarceration and recidivism in the US, including inadequate facilities to treat mental health and substance use problems that lead to criminal activity, intergenerational transmission of risk for criminal activity, social and class stratification that provide few opportunities for education and employment, and high rates of incarceration for drug offenses. While the rate and number of incarcerations

### Table 2. Adults Under Correctional Supervision in the US, 2012 and 2013

<table>
<thead>
<tr>
<th>Type of Correctional Supervision (Date)</th>
<th>Number of US Adults Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal prison (year-end 2013)\textsuperscript{a}</td>
<td>215,866</td>
</tr>
<tr>
<td>State prison (year-end 2013)\textsuperscript{a}</td>
<td>1,358,875</td>
</tr>
<tr>
<td>Local jail facilities (mid-year daily average, 2013)\textsuperscript{b}</td>
<td>731,208</td>
</tr>
<tr>
<td>Probation (year-end 2012)\textsuperscript{c}</td>
<td>3,942,800</td>
</tr>
<tr>
<td>Parole (year-end 2012)\textsuperscript{c}</td>
<td>851,200</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Data from Carson (2014).\textsuperscript{7}

\textsuperscript{b} Data from Minton and Golinelli (2014).\textsuperscript{8} Note that about 11.7 million individuals are incarcerated in jail facilities annually (2012-2013 data).

\textsuperscript{c} Data from Glaze and Heberman (2013).\textsuperscript{6}
appear to be stabilizing, after years of increasing, the US still has one of the largest rates of incarceration in the world. Many studies have confirmed that the negative impact of incarceration extends beyond the incarcerated individual to the family and to the community, however the actual social and public health impact of having millions of individuals incarcerated every year may never be entirely clear.

Table 3. Characteristics of Individuals Incarcerated in US Prison and Jail Facilities, 2012 and 2013

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>State and Federal Prisons</th>
<th>Jail Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Sex</td>
<td>93.0%</td>
<td>86.0%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>36.2%</td>
<td>35.8%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>Not Available</td>
<td>1.4%</td>
</tr>
<tr>
<td>Asian</td>
<td>33.3%</td>
<td>47.2%</td>
</tr>
<tr>
<td>White</td>
<td>21.9%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>11.4%</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>32.0%</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>26.4%</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>19.2%</td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>7.4%</td>
<td></td>
</tr>
<tr>
<td>65 or older</td>
<td>2.1%</td>
<td></td>
</tr>
</tbody>
</table>

Data from Carson (2014). Data for state prisons as of December 2012; for federal prisons as of December 2013. Violent crimes include murder, manslaughter, rape/sexual assault, and robbery. Property crimes include burglary, larceny, motor vehicle theft, and fraud. Drug crimes include drug possession and trafficking. Public order crimes include weapons, drunk driving, court offenses, vice, and other public order offenses.

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REFERENCES


Violent crimes include murder, manslaughter, rape/sexual assault, and robbery. Property crimes include burglary, larceny, motor vehicle theft, and fraud. Drug crimes include drug possession and trafficking. Public order crimes include weapons, drunk driving, court offenses, vice, and other public order offenses.

Figure 1. Percent Distribution of Most Serious Offense Committed by Individuals in State and Federal Prisons in the US

Data from Carson (2014). Data for state prisons as of December 2012; for federal prisons as of December 2013.
The Health of Incarcerated Individuals: A Life Course Perspective

by Wendy L. Hellerstedt, MPH, PhD

Individually enter incarceration in poor health, with disproportionately high rates of substance use, mental illness, and other health conditions. They may have high—and unmet—needs for care while incarcerated. After their release, they often return to troubled communities, fractured social relationships, and limited socioeconomic opportunities, further increasing their health and mortality risks.

Are people who are in poor health more likely to commit crimes than those in good health? Does incarceration contribute to poorer health? Does the stigma of incarceration affect health after release from prison or jail? There are no easy answers. What is clear is that incarcerated individuals and those with histories of incarceration—young and old, female and male—often have poorer health than that of the general population. Data suggest that there are three critical periods of the life course that are uniquely associated with incarceration and contribute to the health trajectories of incarcerated individuals:

Health prior to incarceration.

Individuals who are at high risk for health problems—related to violence, mental illness, substance abuse, infectious disease, and chronic disease—are also at high risk for incarceration. Individuals thus enter jails and prisons with unmet health needs. Social disparities, which are strongly linked to health problems, are also prevalent prior to incarceration. Data for state, federal, and jail inmates show that:

• 5-10% were homeless before incarceration;
• Two-thirds to three-quarters were unemployed in the month before arrest;
• 10-25% had histories of physical or sexual abuse;
• 30-50% had ever received public assistance while growing up;
• 6-18% had lived in foster homes as children; and
• 20-40% experienced abuse from a parent or a guardian as a child.

Health and health care during incarceration.

Correctional facilities in the US are required to provide health care to inmates, but such care varies significantly across states and types of correctional facilities. Data from surveys conducted in 2002 and 2004 showed that about 14% of federal inmates, 20% of state inmates, and 68% of jail inmates did not receive a medical examination while incarcerated. Local jails, especially, may not have the resources—or adequate time—to screen or treat incarcerated individuals. In addition to inconsistent provision of adequate health care for chronic or infectious conditions, incarceration could exacerbate mental health problems and increase risks for injury and violence exposure. Conversely, incarceration may provide opportunities for screening or treatment (e.g., for substance abuse, oral health). Correctional facilities may also promote healthy environments. For example, in 2004 the Federal Bureau of Prisons placed a near-total ban on smoking in all of its prisons. While some state facilities have indoor smoking bans, about half of state prisons do not.

Health after release from incarceration.

Upon release, it is likely that the majority of individuals will experience:

• Re-incarceration. A recent study of individuals incarcerated in state prisons in 30 states showed that, within five years of release, 77% were arrested for a new crime.

“Individuals who are at high risk for health problems ... are also at high risk for incarceration.”
A difficult transition back to the community. Re-integration issues are related to finding housing, employment, insurance, and social services and to re-establishing family and social relationships. The attempt to live a “normal” life may be threatened by the stigma associated with having been incarcerated and with legal issues that affect post-release life (e.g., parole, inability to vote); and

High-risk health behaviors. Post-release behaviors include high-risk sexual behavior, drug use, weapons exposure, partner abuse, and poor health care. Several studies have documented excess preventable mortality among released individuals.

The following presents a select (and limited) summary of what is known about the health of incarcerated adults. The data are from a growing number of research articles and from initiatives to collect and report administrative data, primarily on the part of the Bureau for Justice Statistics. Those who review the literature and data about incarcerated individuals must do so with several caveats in mind:

Small studies—and studies that depend on the ability to follow individuals post-release—often have select and non-generalizable populations because of poor response rates, convenience sampling, small numbers of participants, etc.;

Official data from federal or state surveys may have limited information about context (e.g., length of stay and health outcomes, receipt of medical services and disease status) and generally do not have clinical or behavioral data;

Data may age quickly and lose relevance. For example, much of this article relies on data from the early 2000s. While they may be the most recent data available, they may not reflect the state of current health care and/or the impact of criminal justice policies; and

The validity of some data is contingent upon screening protocols in jails, states, and prisons. A facility can only report health problems for which it screens.

Substance Use and Mental Illness
Mental illness and substance use disorders are among the most frequently studied conditions of incarcerated individuals. Blandford and Osher, using administrative and research reports, showed that the prevalence of substance use and serious mental health disorders is high among incarcerated individuals and that these problems co-occur. Their data (Table 1) are imperfect, but they represent the best data available.

### Chronic Diseases and Medical Problems
Thirty-nine percent of federal inmates, 43% of state inmates, and 39% of those incarcerated in jails reported at least one chronic medical condition, according to the 2002 and 2004 Survey of Inmates data (the most recent data available). This translates into about 800,000 individuals.

It is difficult to compare health data for incarcerated individuals and the general population because incarcerated individuals are not included in national health surveys, and they vary from the public in socioeconomic conditions. However, a recent study compared data from the 2002-2004 population-based US National Interview Survey (n=76,597) with 2002-2004 surveys data for individuals incarcerated in US prisons (n=14,373) and jails (n=6,582). The prevalence of chronic conditions varied by age and sex, but, overall, the leading conditions for incarcerated people were:

- Overweight (47% of the incarcerated population);
- Hypertension (24.7%);
- Obesity (24.7%);
- Arthritis (23.1%); and
- Asthma (13.9%).

For most of the conditions examined, the risks for incarcerated individuals were not much different than those for the general population. After adjustment for major confounders (i.e., age, sex, race, education, nativity, marital status, alcohol use), incarcerated individuals had slightly higher risks for hypertension, asthma, and arthritis and about three times higher risk for hepatitis. Incarcerated women were at about four times higher risks for cervical cancer. Incarcerated individuals were at lower risks for obesity and underweight and they were at no excess risk for diabetes, angina, or heart attack.

The prevalence of HIV/AIDS is much higher in the incarcerated population compared to the general population, but it may be decreasing. According to the Bureau of Justice Statistics, about 18,000 men and 1,700 women in state or federal prisons have HIV/AIDS: 1.9% of female and 1.6% of male state prisoners and 1.4% of female and 1.0%
of male federal prisoners.13

Sex differences. In 2004, women in state and federal prisons were more likely than men to report at least one medical problem (65% vs. 40%).13 A survey of 6,982 jail inmates in 2002 also showed sex differences in some chronic conditions.14 For example, compared to men, women were seven times more likely to have had cancer, two times more likely to have diabetes, and two times more likely to have asthma.18 Women were also twice as likely as men to report psychiatric problems and 1.5 times more likely to be drug dependent.16 The 2004 survey data showed no sex differences in reported dental problems (50% of all inmates) and few differences in the presence of at least one of six impairments (i.e., speech, hearing, vision, mobility, learning, mental health).13 Learning problems were the most common impairment for women and men (23% of state and 13% of federal prisoners).15 Hearing and vision impairments affected 5–10% of individuals in state and federal prisons, respectively.13

Access to care for chronic conditions. Using Bureau of Justice Survey of Inmates data for individuals in state and federal prisons (2004) and local jails (2002), Wilper and colleagues identified health care access problems (Table 2).12 Another report, from the Bureau of Justice, using the same data, reported that 70–76% of prisoners saw medical personnel for a health problem, 80–86% saw medical personnel for an injury, and 86% saw professionals for a dental problem.13 These reports are not necessarily contradictory: incarcerated individuals may have access to health care, but it may not be consistent, resulting in some unmet needs for care.

Reproductive and Sexual Health

The majority of incarcerated individuals are of reproductive age (18–44 yrs): 74% of females and 71% of males.17 Most incarcerated individuals are parents upon entry18 and may be at risk for unintended pregnancy/pregnancy involvement after release.2,18 They also may be at high risk for sexually transmitted infections (STIs) both before and after incarceration.18

Women. Data from state and federal prisoners from 2004 indicate that the majority of incarcerated females received medical care that could detect reproductive health problems: about 90% reported having had a medical exam since admission and over three-quarters reported having received a pelvic exam.13

There is likely great variability in contraceptive and family planning counseling to incarcerated women. Clarke et al. identified a missed opportunity to provide family planning and reproductive health services based on data from 484 incarcerated women in Rhode Island.18 They found that 84% of those surveyed had been pregnant and 84% had had at least one unplanned pregnancy.18 The median age at first pregnancy was 17 years (the mean age of the sample was 31 years).18 The median number of lifetime pregnancies was six and the median number of births was two; 35% reported a history of abortion.14 Forty-nine percent of the women reported histories of having had one or more STIs.18 Many of the risk factors that made the women susceptible to unplanned pregnancies (e.g., multiple sexual partners, lack of condom use, substance use) also put them at high risk for STIs upon release. The authors noted that incarceration may provide an opportunity for disenfranchised women to receive preventive reproductive health care and education.18

Similar to the report by Clarke et al., Bureau of Justice data show that most of incarcerated women are parents.13,14 Further, about 4% of women in state prisons,13 3% in federal prisons,13 and 5% in jails14 are thought to be pregnant at intake. As discussed by Colbert and Silko in this volume, pregnancy testing is a complex issue, so the estimates of pregnancy among incarcerated women are limited to known pregnancies. Several other articles in this volume address the special needs of pregnant incarcerated women, about whom little is known. While there are recommendations for the health care of incarcerated pregnant women,16 there is little documentation (except that provided by Ferszt and Clarke,19 summarized in this volume) about whether such recommendations (e.g., diet, screening, assessment for substance use) are universally followed.

The Bureau of Justice does not report birth outcomes for incarcerated women. Given their relatively high rates of mental illness, substance use,12-14 STIs, and socioeconomic vulnerabilities, it is likely that the birth outcomes of incarcerated women (who may deliver while incarcerated or after release) are poorer than those of the general population. An analysis of 2006–2010 Pregnancy Risk Assessment and Monitoring System data of non-incarcerated

<table>
<thead>
<tr>
<th>Condition</th>
<th>Federal Prison Inmates (n=129,196)</th>
<th>State Prison Inmates (n=1,225,680)</th>
<th>Jail Inmates (n=631,241)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>93.0%</td>
<td>93.3%</td>
<td>88.4%</td>
</tr>
<tr>
<td>Response to medical problems while incarcerated</td>
<td>13.9%</td>
<td>20.1%</td>
<td>68.4%</td>
</tr>
<tr>
<td>Active medical problem (e.g., similar to persistent problems, also includes HIV/AIDS), discontinued use of same medication during incarceration</td>
<td>20.9%</td>
<td>24.3%</td>
<td>36.5%</td>
</tr>
<tr>
<td>Not examined following serious injury (i.e., gunshot wound, broken bone, sexual assault, internal injuries, knocked unconscious)</td>
<td>7.7%</td>
<td>12.0%</td>
<td>24.7%</td>
</tr>
</tbody>
</table>

*Data are from Wilper et al.: who examined 2002-2004 national Surveys of Inmates for 14,499 individuals in 287 state prisons; 3,686 individuals in 39 federal prisons; and 6,982 individuals in 417 jails. Respondents were randomly selected and response rates were over 80% for each type of facility. The data in the table are weighted to provide national estimates.
women who had recently given birth in the US found that a history incarceration (the woman or her partner) within one year of a birth was negatively associated with receiving prenatal care in the first trimester and with having received nine prenatal visits. Such women were also more likely than those with no personal or partner history of incarceration to be at higher social risks: they were more likely to have experienced partner abuse during pregnancy, to have received WIC during their pregnancies, and to have had their delivery and/or prenatal care paid for by Medicaid. In the 12 months before delivery, those with personal or partner histories of incarceration in the last year were also more likely than those with no such history to have been separated/divorced, homeless, in a physical fight, or have someone close to them with a substance use problem. Little is known about miscarriages or abortions during incarceration. Abortion is a particularly complex topic because incarcerated women have a legal right to this procedure—and the American College of Obstetricians and Gynecologists recommends the availability of abortion services for incarcerated women—but recommends the availability of abortion during pregnancy, to have received WIC during their pregnancies, and to have had their delivery and/or prenatal care paid for by Medicaid. In the 12 months before delivery, those with personal or partner histories of incarceration in the last year were also more likely than those with no such history to have been separated/divorced, homeless, in a physical fight, or have someone close to them with a substance use problem.

Little is known about miscarriages or abortions during incarceration. Abortion is a particularly complex topic because incarcerated women have a legal right to this procedure—and the American College of Obstetricians and Gynecologists recommends the availability of abortion services for incarcerated women—but it is unlikely that correctional facilities will provide counseling about it or provide abortion access. A national survey of health professionals in correctional surveys (with a very poor response rate) suggested that abortion access was variable in 2006-2007. Only 68% of the respondents indicated that women at their facility could obtain “elective” abortions. In the facilities that allowed abortion, 44% referred pregnant women to counseling to learn about their options and, for women who chose abortion, 88% provided transportation but only 54% helped arrange appointments. The findings of Ferszt and Clarke also showed inconsistent access to abortion services and counseling: nine of 19 facilities addressed pregnancy termination in their national survey of state prisons.

Men. The easiest to measure—and probably the most important—reproductive health conditions for incarcerated men are STIs and HIV/AIDS. Other reproductive health issues afflicting men are not easily assessed because they are rare, have a long latency period, and/or are not routinely screened for in jails and prisons. Infertility is one such condition. Infertility is strongly associated with STIs. Human papillomavirus (HPV)-related cancers present another set of conditions associated with STIs. Specific high-risk types of HPV, if persistent, can lead to some rare cancers of the penis, anus, and oropharynx in men.

Men may enter prison or jail with HIV or STIs. They may or may not be aware of their status or receive treatment. Males may acquire HIV or STIs during incarceration, either through consensual or non-consensual sexual behavior. Finally, males may transmit STIs and HIV after prison release. There are several reasons that may explain why STI and HIV rates are higher among men with a history of incarceration compared to men without such histories:

- Incarcerated men are at higher risk for mental health problems and substance use than men in the general public. Both are associated with STI and HIV acquisition;
- Sexual violence is likely common among incarcerated men, although there are few studies that quantify its occurrence. One study of 6,964 incarcerated men in 12 adult prisons reported that 21% were physically assaulted during a 6-month period and 2–5% had been sexually assaulted. The perpetrators of violence were other prisoners and staff. Physical injury was common, occurring in 40% of the physical assaults and 70% of the sexual assaults;

Violence Exposure

Data strongly suggest that incarcerated individuals are likely to have experienced violence prior to incarceration, during childhood and/or as adults. They are also at risk for violence upon re-entry into the community. Injuries, which may be violence-related, are common among incarcerated individuals. There is little sex variation among incarcerated individuals who have had an accident since admission (about 20% for females and males), but men are more likely than women to report getting into fight in state (16.5% vs. 8.5%) and federal (8.7% vs. 3.6%) facilities. Administrative data show a great gap between allegations of sexual violence and substantiation of such acts. In 2011,

As maternal and child health (MCH) programs and initiatives continue to be guided by a life course framework, measures are needed to determine their success. The Association of Maternal and Child Health Professionals (AMCHP) identified a set of indicators to measure the progress of life course approaches to improve maternal and child health, with funding from the W.K. Kellogg Foundation.

AMCHP identified more than 50 important metrics, including the population incarceration rates of youth and of adults. AMCHP stated that youth and adult incarceration measures in a community not only “reflect individual health effects but the overall social capital within and across populations.” High incarceration rates represent concentrated disadvantage in a community and may be a marker of institutionalized racism, according to AMCHP. AMCHP further speculates that incarceration may be more amenable to public health interventions than other institutional racism markers, like residential segregation by race. A full description of the use of incarceration rates as MCH-focused life course indicators is at http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-58AB_Incarceration_Final_8-1-2014.pdf.
correctional administrators in prisons reported 6,660 allegations of sexual violence, of which 605 were substantiated based on follow-up investigations. Jails reported 2,042 allegations, of which 284 were substantiated. Fifty-one percent of all of the allegations involved non-consensual sexual acts or abusive sexual contacts of inmates with other inmates; 49% involved staff sexual misconduct or sexual harassment.

**Mortality**

In 2012 (most recent data), 4,309 incarcerated individuals died in state prisons or jails; 78% of such deaths occurred in state prisons. Causes of death varied by facility type. In state prisons, 88% of the deaths were related to illness (cancer was the single most common cause of death, followed by suicide, homicide, and cardiovascular disease). A similar assessment of 155,272 formerly incarcerated individuals from New York City jails also found excess mortality risk. After adjustment for age, sex, and neighborhood, formerly incarcerated individuals had two times higher risks for drug-related deaths and homicides compared to those with no such histories. This study also found that mortality risks were highest during the first two weeks after release and that risks were higher for individuals who had histories of homelessness.

Despite their high risks, most released inmates lack medical insurance. Although discharge-planning practices vary considerably, inmates are typically released with no more than a 2-week supply of even crucial medications, like insulin, and often have no primary care follow-up.

**Post-release Mortality**

Nearly all incarcerated individuals will eventually return to the community. The post-release period presents health risks to released individuals and, because of recidivism, costs to society. In a retrospective cohort study of 30,237 released individuals in Washington State, Binswanger and colleagues found that mortality rates were highest 12 weeks after release. The mean age of the released individuals was 33 years, with a range of 18–84 years. Over an average follow-up of two years, 443 individuals died; their mortality rate was 3.5 times higher than that of state residents of the same age, sex, and race. Drug overdose was the leading cause of death, followed by suicide, homicide, and cardiovascular disease. A similar assessment of 155,272 formerly incarcerated individuals from New York City jails also found excess mortality risk. After adjustment for age, sex, and neighborhood, formerly incarcerated individuals had two times higher risks for drug-related deaths and homicides compared to those with no such histories. This study also found that mortality risks were highest during the first two weeks after release and that risks were higher for individuals who had histories of homelessness.

Despite their high risks, most released inmates lack medical insurance. Although discharge-planning practices vary considerably, inmates are typically released with no more than a 2-week supply of even crucial medications, like insulin, and often have no primary care follow-up.

**Conclusion**

The incarceration rate has risen steeply in the US, increasing by 400% between 1980 and 2013. In 2013, there were about seven million people supervised by local, state, or federal corrections systems. If all of the incarcerated individuals in the US were housed in one city, it would be the second largest city in the US. For decades, the US health and criminal justice system have been engaged in a vicious cycle: the most disenfranchised individuals, with under- or untreated conditions (especially related to substance abuse and mental illness), engage in illegal behaviors. While prisons and jails are necessary, they are not health treatment facilities. When ill people enter the criminal justice system they don't necessarily get better. At least 95% of incarcerated individuals return to their communities, bringing their health care needs with them. About 80% are without insurance upon re-entry and, not surprisingly, formerly incarcerated individuals are at high risk of preventable death shortly after they are released.

Ultimately, the impact of incarceration extends beyond those who are incarcerated. In low-income communities where a large portion of the male population is in correctional facilities at any given time, incarceration affects the stability of relationships, presenting challenges to mental health and abstinence from substances, as well as resulting in risky sexual partnerships that could lead to unwanted pregnancies, HIV, or STIs. Incarceration—and the stigma attached to those who are released into the community—is also associated with low wages and unemployment, further exacerbating disparities in health and increasing the social marginalization of individuals involved with the criminal justice system. Incarceration is also inter-generational. Improving the health of incarcerated individuals—and improving their social mobility when they return to their communities—could result in substantial future decreases in the number of people involved in the already crowded criminal justice system.

There are deep gaps in information about the health status of incarcerated individuals. They are not included in US population-based health surveys and, as discussed by Benning and Hellerstedt elsewhere in this volume, there are many barriers to involving them in research. Extant data are primarily from the correctional system, which produces no clinical data and limited health behavior data. With better knowledge, correctional health-care providers could take advantage of opportunities to screen,
treat, and prevent conditions that are disproportionately prevalent in the socially disenfranchised populations at highest risk for incarceration.35 Community and public health providers also need better knowledge, as they have become increasingly aware of their responsibilities to serve individuals who are supervised, in some way, by the criminal justice system.

Rich et al. suggest that there may be ways to transform the vicious cycle of incarceration and exacerbation of poor health and social disparities into a “virtuous circle.”36 Criminal justice and community health systems can create new models to improve the health care of incarcerated individuals and ensure continuity of care upon release.33 Corrrectional health facilities can provide more efficient and better care, using the Affordable Care Act (ACA) as the foundation for financial and systems health delivery models.35 Through expansion of Medicaid (in many states) the ACA also increases access to health insurance for incarcerated individuals after they re-enter their communities.36 The aims of such a community health/criminal justice system collaboration should be to improve the health of a socially vulnerable population and, in doing so, reduce the exacerbation of social and health risks this population (and its offspring) experiences when it encounters the criminal justice system.

REFERENCES

Wendy L. Hellerstedt, MPH, PhD, is an Associate Professor and the Director of the Center for Leadership Education in Maternal and Child Public Health, in the Division of Epidemiology & Community Health, School of Public Health, University of Minnesota.
Governments worldwide, including in the United States (US), are addressing issues associated with incarcerated pregnant and postpartum women. Few states have suitable policies to ensure adequate health care and education for this population, despite the fact that between 3–5% of the more than 200,000 incarcerated US women are pregnant at intake.1 How are federal and Minnesota policy makers attempting to modify health care and programs in jails and prisons to create better outcomes for incarcerated pregnant and postpartum women and their children?

Prenatal and Postpartum Health Care and Services

Incarcerated individuals are entitled to health care, including prenatal and postpartum care, under the Eighth Amendment to the US Constitution. In spite of this right, the quality of such care and the timeliness of care delivery for incarcerated women are inadequate in the US. According to Bureau of Justice Statistics, only 54% of incarcerated pregnant women received pregnancy-related care in 2004.1 Incarcerated women often have high-risk pregnancies2 and the absence of, or delay in, care could threaten the health of both the woman and her fetus.3 Data about breastfeeding support or postpartum health care for incarcerated women are difficult to find.

National Policies and Programs for Pregnant and Postpartum Women

Most pregnant and postpartum women in prisons are in state, not federal, facilities. The federal Bureau of Prisons (BOP) oversees 27 federal facilities for females in the US.4 It requires pregnancy testing at intake and that women report if they suspect they are pregnant. It has a comprehensive prenatal care policy, but the implementation of its care recommendations may be inconsistent across its facilities.2 It also has a policy against shackling, but its implementation is not clear.2 The BOP operates a community residential program called Mothers and Infants Nurturing Together (MINT) for pregnant women. This program is not available in all facilities and it has strict eligibility criteria: women must be in their last three months of pregnancy, have less than five years to serve on their sentence, be eligible for furlough, and be considered “low risk.” Women may stay with their newborns for three months (some may stay longer). The purpose of the program is to promote bonding and enhance parenting skills. MINT sites also provide education to enhance social, educational, and economic abilities women can use when they are released from prison. The MINT program is the only postpartum program the BOP operates. It has no prison nurseries in any of its federal prisons.4

Legislation in Minnesota: Healthy Beginnings for Babies of Incarcerated Women

A 2010 report card on state standards of care for incarcerated pregnant women and mothers showed that 38 states had neither a state law or a corrections policy...
mandating any or adequate prenatal care for incarcerated women. Likely because of lack of data, Minnesota received a failing grade on this report card for prenatal care, a grade of “C” for shackling policies, and a grade of “A” for the availability of family-based treatment as an alternative to incarceration.

In 2014, Minnesota’s legislature unanimously passed—and Governor Mark Dayton signed into law—the state’s first law to consider the unique needs of incarcerated pregnant and postpartum women (SF2423/HF2833). Advocates from the Better Birth Coalition, Children’s Defense Fund-Minnesota, the Isis Rising Prison Doula Program, and the University of Minnesota worked with Senator Barbara Goodwin (DFL, District 41) and Representative Carolyn Laine (DFL, District 41B) to pass the bill. Other supporters of the bill included the American Congress of Obstetricians and Gynecologists (ACOG), the Second Chance Coalition, and the Minnesota Citizens Concerned for Life. The law applied to the Minnesota Department of Corrections (DOC) in July 2014 and to all other correctional facilities in July 2015.

The bill specifically addresses the use of restraints with pregnant and postpartum women:

- The use of restraints is prohibited on women who are pregnant, in labor, or within three days following childbirth except in extraordinary circumstances. When restraints are used, they must be the least restrictive available and reasonable. During inmate transport, restraints may not include waist chains or handcuffs behind the back;
- If restraints are necessary for safety or security reasons during labor or within three days following childbirth, there must also be no objection from the medical provider; and
- Corrections officers must be provided with applicable training to ensure understanding and compliance.

Additionally, the bill establishes standards of care for women incarcerated beyond their initial court appearance. Prior to the legislation, the Minnesota Department of Corrections women’s prison in Shakopee, Minnesota and 84 county-run jail facilities had policies pertaining to pregnant inmates, but they varied by location and were subject to change. The new legislation aims to create consistency across Minnesota’s correctional system by requiring correctional facilities to:

- Offer pregnancy tests, rather than rely on women to request them, so that all pregnancies can be identified and women can receive appropriate pregnancy-related care;
- Test pregnant women for sexually transmitted infections (STIs). Left untreated, STIs can cause complications in pregnancy and/or have a long-term effect on fertility;
- Provide access to a certified doula providing there is no charge to the correctional facility (e.g., the fees would be waived, donated, or absorbed by family/friends). Hodnett et al., in a systematic review of doula care for non-incarcerated women, found that it was associated with improved maternal outcomes. Women who received continuous doula intrapartum support had shorter labors, were more likely to have spontaneous vaginal deliveries, and were less likely to have cesarean deliveries, and were less likely to have prolonged labor, and were less likely to have neonatal complications.

PREGNANT WOMEN AND THE USE OF RESTRAINTS

A controversial policy issue is the use of restraints with pregnant women, defined by the American Congress of Obstetricians and Gynecologists (ACOG) as “using any physical restraint or mechanical device to control the movement of a prisoner’s body or limbs, including handcuffs, leg shackles, and belly chains.” Restraints may also include chemicals (e.g., sedatives). ACOG specifically addresses the use of physical and mechanical restraints on pregnant, laboring, and postpartum women, concluding that they present health and safety risks to women and their fetuses. For example, restraining a woman may increase her risks associated with falling because she cannot protect herself or her fetus if she falls forward. One form of restraint, shackling, involves restricting someone’s movement by securing shackles or handcuffs around the ankles or wrists—and, sometimes, heavy chains around the stomach. If shackling is used during labor it could prohibit a woman’s ability to reposition, thus reducing blood flow to the fetus.1

Most states do not limit—either in law or corrections policy—one of the most severe forms of restraints (shackling) of incarcerated pregnant women. As of September 2014, only 21 states had passed laws limiting the use of restraints on pregnant and postpartum women. Even in states where laws exist against shackling, it may still occur. In addition to ACOG, many national and international agencies and organizations have denounced shackling pregnant women as a human rights violation.

REFERENCES


Minnesota law SF2423/HF2833, authored by Senator Barbara Goodwin (DFL, District 41) and Representative Carolyn Laine (DFL, District 41B), mandated the creation of an advisory committee to review the existing correctional standards for incarcerated pregnant and postpartum women and, after such review, make recommendations for the 2015/2016 legislative session. As of December 2014, the advisory committee members were:

- Jessica Anderson, Children’s Defense Fund-Minnesota
- Sara Benning, University of Minnesota, School of Public Health, Division of Epidemiology & Community Health
- Joshua Berg, Meeker County
- Guy Bosch, Minnesota Correctional Facility-Shakopee
- Brad Colbert, Legal Aid for Minnesota Prisoners, William Mitchell College of Law
- Holly Compo, Carlton County
- Paul Coughlin, Carlton County
- Renee Dahring, Ramsey County Adult Detention Center and Corrections and University of Minnesota, School of Nursing
- Ruthie Dallas, Minnesota Department of Human Services, Alcohol and Drug Abuse Division
- Margaret (Peg) Gemmell, Minnesota Department of Corrections
- Erica Gerrity, Isis Rising-Prison Doula Project
- Erika Jensen, Hennepin County Project CHILD
- Diane Haugen, Saint Paul-Ramsey County Public Health
- Wendy Hellerstedt, University of Minnesota, School of Public Health, Division of Epidemiology & Community Health
- Colleen Holst, Minnesota Correctional Facility-Shakopee
- Susan Lane, Better Birth Coalition
- Todd Leonard, MEnd Care
- Kate Linde, Minnesota Department of Health, Division of Community and Family Health
- Kathleen Lonergan, Minnesota Department of Corrections
- Rebecca Shlafer, University of Minnesota, Department of Pediatrics, Division of General Pediatrics and Adolescent Health
- Robin Sikkila, McLeod County Public Health
- Monette Soderholm, Nobles County
- Tim Thompson, Minnesota Department of Corrections

report dissatisfaction with their childbirth experiences;  
- Distribute prenatal, childbirth, and parenting educational materials; and  
- Conduct a mental health assessment and provide treatment during pregnancy and in the postpartum (including psychotropic medications and therapeutic care for postpartum depression). Maternal mental illness is a risk factor for poor birth outcomes.  

**Minnesota’s Legislative Advisory Committee Overview and Proceedings**

Minnesota’s new law mandated the creation of an advisory committee to review the existing correctional standards and to make recommendations for the 2015/2016 legislative session. It is composed of advocates, state agency representatives, public health nurses, lawyers, physicians, and corrections staff, as well as individuals from the University of Minnesota’s Maternal and Child Health (MCH) Program (see box above). The committee, chaired by Dr. Rebecca Shlafer (an Assistant Professor in the Medical School and an MCH student at the University of Minnesota), began meeting in September 2014 to compile a report due to the Minnesota legislature in January 2015. The report is expected to:

- Provide an overview of existing policies and resources in Minnesota;  
- Suggest revisions to the bill’s current language, which includes clarifying any ambiguity about the term “restraints”;  
- Address language about “community standards of care,” including what is considered standard health care in a prison or jail for pregnant women, as well as case follow-up for pregnant women; and  
- Outline goals and recommendations for the 2015-2016 state legislative session.  

Coming together as a committee has provided advisors with regular opportunities to have productive, cross-sector conversations that helped members better understand each other’s challenges, build trust, trouble-shoot issues, and find opportunities to collaborate outside of committee meetings. For example, in October 2014, many of the advisors collaborated to create an institute for approximately 100 attendees about the reproductive health of incarcerated women, hosted by the Center for Leadership Education in Maternal and Child Public Health (see short article about the institute elsewhere in this volume). Several advisors also contributed to this volume of Healthy Generations.

**Conclusion and Next Steps**

National advocacy organizations, like the Rebecca Project for Human Rights and the National Women’s Law Center, have recognized the importance of reviewing—and disseminating information about—state and federal policies that affect the birth outcomes of incarcerated pregnant women. There is no question that incarcerated women are socially vulnerable and that they begin their pregnancies at risk for poor outcomes. It is also clear that prisons and jails have the responsibility to provide appropriate health care and pregnancy support and that correctional staff want to provide good care. Correctional facilities, especially those in rural communities, often have supply and provider access issues. For example, many local jails do not have funds to pay for nurses, lab tests, and other basic health care needs for pregnant and postpartum women. Health care policies are essential for incarcerated pregnant and postpartum women, but the policies that will have the most impact will have funding associated with them. Policies reflect the ideal: funding enables implementation.
For More Information

REFERENCES

Jessica Anderson is the Legislative Affairs and Communications Director at the Children’s Defense Fund–Minnesota. Sara Benning is the Director of Communications and Outreach at the Center for Leadership Education in Maternal and Child Public Health, Division of Epidemiology & Community Health, School of Public Health, University of Minnesota.

FACEBOOK AND TWITTER PAGES FOR MATERNAL AND CHILD HEALTH AT THE UNIVERSITY OF MINNESOTA


We post news about public health research, programs, policies, and events related to women’s health, reproductive health, infant and child health, adolescent health, and the health of vulnerable populations. Our site may be of most interest to public health practitioners, policymakers, researchers, students and graduates of our MCH program, but our intention is to have a vital and interesting site for anyone who is interested in MCH public health and in networking with like-minded people.
A National Survey of Women’s Correctional Facilities: Health Care for Pregnant Incarcerated Women

by Ginette Ferszt, PhD, RN, PMHCNS-BC, and Shoua Vang

In the US, an estimated 3–5% of incarcerated women are pregnant when they enter correctional facilities.\textsuperscript{1-3} However, this estimate may not accurately depict the prevalence of incarcerated women who are pregnant because of variations in reporting requirements.\textsuperscript{4} Incarcerated women are disproportionately non-white, impoverished, and poorly educated.\textsuperscript{5-9} Compared to the general population of US women, they are also more likely to have experienced a chronic medical illness, poor mental health and exposure to violence.\textsuperscript{1,10,11}

One of the authors (GF) and Jennifer Clarke MD, MPH, recognized the absence of data related to how state prisons provide health care to pregnant women, despite their high health risks. To address this, they conducted a national survey in 2009 of women’s state correctional facilities in the US.\textsuperscript{12} Their results showed a variety of health care practices for pregnant women and many gaps in services.

National Survey Methods

Over a four-month period in 2009, the survey administrators telephoned wardens of women’s state correctional facilities in all 50 states about their interest in participating in the survey. They described the survey’s purpose, what participation entailed, and how confidentiality would be maintained. Of those for whom telephone contact was attempted, three did not respond and 15 said they were not able to take the survey because of policies. The surveys were then made available to the remaining 32 wardens. Of those who agreed to participate, 19 completed the survey (39% of those who agreed to participate and 38% of the target sample).

The survey had 62 multiple choice and four open-ended questions about the availability and/or quality of screening for pregnancy, prenatal care, nutritional needs, accommodations, counseling and support, childbirth and parenting classes, the use of shackles and restraints, challenges, and health-care policies. The survey was made available through SurveyMonkey, email, and regular mail.

Statewide Variations in the Care of Incarcerated Pregnant Women

Data from the 19 state correctional facilities showed great variation in the number of incarcerated pregnant women in their facilities:

- Some facilities: 137–1300;
- Other facilities: 3–400;
- During incarceration: 3–100; and
- Rate of 52% and a second reported a 40% rate.

The data showed major variations in health care practices for pregnant women (Table 1). General health care providers were available at most facilities, but in 12 facilities primary prenatal care was provided at offsite locations. The results also indicated that many facilities were not providing adequate nutrition for pregnant women. For example, most facilities did not provide extra foods such as fruits, cereal, and peanut butter, daily to pregnant women. Although 16 of the 19 facilities provided lower bunk beds for sleeping, only five offered two mattresses during pregnancy, an important accommodation because most prison mattresses are only 2–3 inches thick. Also, 10 facilities did not allow extra rest periods and four did not provide work accommodations for pregnant women.
Counseling and support services, as well as childbirth and parenting classes, were limited in most facilities. Eight facilities provided parenting education and an even fewer number provided individual counseling (four facilities), support groups (four facilities), and special pregnancy and delivery education programs (two facilities). However, many facilities offered counseling for pregnancy termination (15 facilities) and birth control (14 facilities).

The survey data indicated that 10 facilities used some type of restraints (handcuffs, leg irons, and belly chains) during transportation. Three facilities also continue to use some type of restraint during labor and childbirth. According to the American College of Gynecologists and Obstetricians, restraints make it more difficult for physicians to assess the patient and fetus, increases pain during labor and delivery, and is a demeaning and unnecessary practice.13

Implications for Policy
The data showed that adherence to recommendations about the care of incarcerated pregnant women were significantly lacking. Such recommendations—from organizations that include the National Commission on Correctional Health Care, the American College of Obstetricians and Gynecologists, and the American Public Health Association—include: prenatal and postnatal care, prenatal health education, mother-baby bonding, assessment and treatment for substance abuse, prohibition of restraints, training of health care staff, and documentation of services.14

Although progress has been made in the past two decades, only 21 states have passed legislation prohibiting or limiting the use of restraints. In some states with such legislation, implementation continues to be a problem. Further development and enforcement of these recommendations by the Department of Corrections and correctional facilities are necessary for ensuring the opportunity for optimal health for all incarcerated mothers and their babies in the US.

For More Information
Standards for Pregnancy-Related Health Care and Abortion for Women in Prison.

<table>
<thead>
<tr>
<th>Table 1. Pregnant Women and Health Care Practices: Results From a National Survey of 19 Women’s Correctional Facilities (from Table 2, Ferszt and Clarke, 2012).12</th>
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</thead>
<tbody>
<tr>
<td><strong>Screening practices</strong></td>
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<tr>
<td>Screen all women for pregnancy</td>
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<tr>
<td>Screen all women for sexual abuse</td>
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<tr>
<td>Screen all women for substance use</td>
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<tr>
<td><strong>On-site health care provider</strong></td>
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<tr>
<td>General Practice Physician in the facility (with different number of days/wk)</td>
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<tr>
<td>Ob/GYN MD weekly or bi-weekly</td>
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<tr>
<td>Midwife (weekly; 2 have midwife and OB/GYN)</td>
</tr>
<tr>
<td>Nurse Practitioner (1-2 times/wk)</td>
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<tr>
<td>No onsite health care provider</td>
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<tr>
<td>Transport the women to a hospital clinic for prenatal care</td>
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<tr>
<td>A nurse available 24/7</td>
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<tr>
<td>A separate facility for pregnant women</td>
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<tr>
<td><strong>Nutritional needs</strong></td>
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<tr>
<td>Milk</td>
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<tr>
<td>Cereal</td>
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<td>Fruit</td>
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<tr>
<td>Peanut butter</td>
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<tr>
<td>Evening snack</td>
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<tr>
<td><strong>Work, rest, sleep and clothing accommodations</strong></td>
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<tr>
<td>Lighter work load</td>
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<tr>
<td>No modifications</td>
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<tr>
<td>Do not allow any work</td>
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<tr>
<td>Allow for extra rest periods</td>
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<tr>
<td>Provide two mattresses</td>
</tr>
<tr>
<td>Have special clothing (e.g., maternity pants)</td>
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<tr>
<td>Special ID (e.g., color ID badge; green wrist badge; pink card for special nutrition needs; medical ID)</td>
</tr>
<tr>
<td>Allow for a lower bunk</td>
</tr>
<tr>
<td><strong>Counseling, support, and educational services</strong></td>
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<tr>
<td>Support groups for pregnant and postpartum women</td>
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<tr>
<td>Individual counseling</td>
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<td>Specific educational programs regarding pregnancy and delivery</td>
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<td>Parenting education</td>
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<tr>
<td>Lamaze classes</td>
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<tr>
<td>Counseling for birth control</td>
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<tr>
<td>Counseling for termination</td>
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<tr>
<td><strong>Family planning/birth control (at woman’s request)</strong></td>
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<tr>
<td>Birth control pills</td>
</tr>
<tr>
<td>Tubal ligation</td>
</tr>
<tr>
<td>Adoption planning</td>
</tr>
<tr>
<td>Termination of pregnancy</td>
</tr>
</tbody>
</table>
On October 20, 2014, approximately 100 people attended the Interdisciplinary Institute on the Reproductive Health of Incarcerated Women in Minnesota at the University of Minnesota. The institute was sponsored by the University of Minnesota’s Center for Leadership Education in Maternal and Child Public Health (HRSA-funded), Irving Harris Programs, and the Clinical and Translational Science Institute (CTSI).

The purpose of the institute was to delineate the major reproductive health issues of incarcerated women, identify best practices and policies to optimize the reproductive health of incarcerated women, and identify best practices and policies for prenatal and postpartum care and education for incarcerated women.

The institute’s format included a mix of presentations from nationally known speakers and a panel featuring local experts working in the field. Minnesota Health Commissioner Edward Ehlinger, MD, MSPH, provided opening remarks.

Other topics and speakers included:

- **Preconception and Prenatal Health**, Wendy Hellerstedt, MPH, PhD, Associate Professor, University of Minnesota, School of Public Health, Division of Epidemiology & Community Health

- **Experiences from the Field Panel Discussion**, Guy Bosch, Associate Warden of Operations, Minnesota Correctional Facility-Shakopee (Moderator); Holly Compo, RN, PHN, Carlton County Jail, Carlton County Personal Care Assistant (PCA) Program; Diane Haugen, RN, PHN, CCHP, Clinical Services Division Manager, Saint Paul-Ramsey County Public Health; and Erika Jensen, MSW, Hennepin County Project CHILD (Chemical Health Intervention, Linkage, and Development)

- **Health Care of Pregnant Women in State Prisons: A National Survey**, Ginette Ferszt, PhD, RN, PMHCNS-BC, Professor, University of Rhode Island, College of Nursing

- **Intervening with Pregnant Women Incarcerated at Jail to Improve Birth Outcomes**, Danielle H. Dallaire, PhD, Associate Professor, College of William & Mary, Psychology Department

- **Pregnancy and Parenting Support for Women in Prison**, Rebecca Shlafer, PhD, Assistant Professor, University of Minnesota, Department of Pediatrics, Division of General Pediatrics and Adolescent Health

- **Prison and Community Supports for Optimum Outcomes During Mother/Baby Co-Residence and Re-entry**, Mary Byrne, PhD, MPH, NP, FAAN, Columbia University School of Nursing, Columbia University College of Physicians and Surgeons, Department of Anesthesiology

- Participants also examined case studies in small-group discussions about current issues and controversies related to the reproductive health of incarcerated women, including whether pregnancy tests should be required at intake, whether infants have the right to access their mothers’ breast milk, and whether mothers who give birth while in custody should be released to parent their infants.

**For More Information**

1. To watch videos of institute speakers, visit: [http://z.umn.edu/102014institute](http://z.umn.edu/102014institute)
2. To access a document containing additional resources and articles about the reproductive health care needs of incarcerated women, visit [http://z.umn.edu/102014resources](http://z.umn.edu/102014resources)
3. To learn more about William & Mary’s Healthy Beginnings Project, which includes a resource page with materials on birth plans for incarcerated mothers, infant feeding tips and questions, and more, visit: [http://www.wm.edu/as/programs/healthy_beginnings](http://www.wm.edu/as/programs/healthy_beginnings)

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**THE INTERDISCIPLINARY INSTITUTE ON THE REPRODUCTIVE HEALTH OF INCARCERATED WOMEN IN MINNESOTA**

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**REFERENCES**

14. Ginette Ferszt, PhD, RN, PMHCNS-BC, has worked as a psychiatric mental health advanced practice nurse and researcher in a women’s correctional facility in Rhode Island for more than 15 years. She is a Professor in the College of Nursing at the University of Rhode Island. Shoua Vang is an MPH student in the Maternal and Child Health Program, Division of Epidemiology & Community Health, School of Public Health, University of Minnesota.
An Overview of Prison Nurseries
Most children with incarcerated mothers live with family members or become part of a state foster care system. In contrast, prison nurseries are housed within a criminal justice facility where incarcerated individuals reside during pregnancy and following delivery, allowing mothers to carry out their sentences while caring for their infants. Currently there are nine prison nurseries operating in the US. With few exceptions, the trend for openings and closings are erratic and difficult to track. Given rolling admissions and varied lengths of stay, the existing nurseries are estimated to provide approximately 110 infants with access to their mothers on any single day. The length of stay for infants in prison nurseries varies by state, ranging from 30 days in North Dakota to 30 months in Washington. When there is no prison nursery available, infant and mother are separated between 24–48 hours after birth. In addition to the grief experienced after a child is removed, separating the mother and infant can significantly affect child development and the attachment process over time which, if fostered towards security, builds an infant’s strengths and resilience.

Elements of a Quality Prison Nursery
The most promising prison nurseries provide infant care that meet children’s developmental needs while providing resources for mothers. Based on work by Byrne and colleagues, necessary components of successful nurseries are those that offer health and parenting support resources (including respite for mothers), integrate substance abuse and mental health treatment, foster peer support and community ties, and prepare mothers for their re-entry into the community and their roles as working mothers.

A quality prison nursery has a full-time, certified childcare center that is overseen by a staff member specializing in child development, making it not unlike other quality infant care centers. Mothers in the New York State Department of Correctional Services’ parenting unit can drop off their baby in the prison nursery Monday through Friday while they work, take classes that help
Healthy Generations

them complete their General Educational Development (GED) tests or advanced education, or attend vocational and personal skill-building programs.

Mothers are permitted to reside with their infants with some protection from New York State Corrections Law Statute 611, which specifies that a child born to a pregnant woman confined to a correctional facility may be returned there with the mother unless the chief medical officer certifies that she is physically unfit to care for that child. To qualify for New York’s prison nursery program, the US’ longest continually run prison nursery program, mothers must complete an application, have no history of child maltreatment or child-related crimes, be free of serious disciplinary infractions and not be convicted of a violent crime, although the latter two conditions can be waived after careful review of an appeal.

Once approved, the infants co-reside with their mothers in the prison nursery from immediately after birth up to 12 months of age, with possible extension to 18 months if the mother will be released in that time.

New York Studies

In 2000, Byrne and colleagues began examining prison nursery program outcomes for both mother and child, making it the first time in 100 years that an outside scientist was permitted to research New York prison nursery outcomes. Over the course of two years and using exploratory ethnographic and cross-sectional studies, 58 mothers and 60 infants were recruited in order to explore a range of mother and infant characteristics that might impact outcomes of the prison nursery program. The researchers utilized observation, informal and structured interviews, filming, questionnaires, prison records, and direct child development assessments to collect data.

Mothers with access to prison nursery services reported good physical health and high self-esteem and well-being and valued their parenting roles, reporting high perceptions of parenting competency.

A subsequent longitudinal study at New York Studies

Attachment and bonding are not the same concept and the terms should not be used interchangeably. Bonding describes a maternal process and attachment describes an infant process.

Bonding is a concept applied to the early mother-infant relationship, particularly during the neonatal period, which describes the mother’s positive affect toward the infant and her comfort with proximity to the infant including gaze, vocalizations, affectionate touch, and skin-to-skin contact.

Attachment is a concept applied to the infant/child relationship with the mother and other caregiving figures. It is a neurobiological process in the child and:

• Takes place over the first years of life;
• Is categorized as secure or insecure (with the latter characterized as avoidant, resistant or disorganized);
• Becomes a system that is triggered to protect the child during situations of fear, illness, or harm;
• Creates a pattern for establishing later relationships; and
• Is predictive of the child’s social and emotional development.

Infants will attach to any primary caregiving figure. This attachment can be secure or insecure and organized or disorganized. Attachment categories are: secure and three types of insecure, including avoidant, ambivalent, and disorganized. Disorganized pattern is the one most clearly associated with social and cognitive deviations and pathology.

The quality of the attachment is what differentiates it as supportive or not supportive to healthy development and relationships.

Once thought to be an unchanging characteristic, it is now known that attachment can change over time. Intervention studies have demonstrated the possibility of changing insecure patterns to secure ones, although negative life factors (especially if cumulative or traumatic) can also produce the opposite effect.

FOUNDATIONAL RESOURCES

York’s Bedford Hills Correctional Facility and Taconic Correctional Facility followed 97 mothers and 100 infants beginning at infant admission into the nursery and lasting into their first re-entry year. Mothers were assigned into a treatment group focused on child health or mother-child relationship synchrony. Weekly nurse practitioner visits were incorporated into existing parenting education and infant child care resources. Throughout the re-entry year, the nurse-led research team continued following 76 infants and caregivers, who received intervention through bi-weekly calls and mailings. A later longer-term re-entry study followed 53 infants and caregivers for children up to age 8 years. Those results are being analyzed.

New York Longitudinal Study Outcomes through First Re-entry Year

Upon completing the nursery program, mothers in each intervention group showed:
- Higher levels of sensitivity;
- Responsiveness and contingency;
- Understanding about childcare; and
- A sense of parenting proficiency.2

There were some differences by group. The small number of infant behavioral concerns were only observed in infants in the child health group. Mothers in the relationship group were more likely to raise securely attached infants even if the mothers did not experience secure attachment with their own parent figures.2

At study entry, a blind coding using the Adult Attachment Interview categorized two-thirds of the mothers with internalized insecure attachment representations of their own parental figures; yet the mothers raised securely attached infants.2 At one-year after re-entry, only 10% of mothers had violated parole and none had new court convictions.

Children of all ages met appropriate mental and motor domain developmental milestones when tested from 3 to 24 months.2 Some experienced language and behavioral lags and were referred for early intervention; however, only five of the nine children qualified for services. Children who transferred out of the prison nursery to alternate family caregivers’ care while their mother fulfilled their sentences showed signs of dysregulation and excessive crying, and sleeping and eating disruptions, but for those with a single consistent caregiver, these behaviors resolved within a month.2

To summarize, interventions with mothers and their infants resulted in:
- Awareness of an integrated “parenting self” by mothers;
- Interruption of an intergenerational cycle of insecure infant attachment;
- Meeting of developmental milestones for infants;
- Nurturing of positive parenting strategies in women with cumulative risks;
- Fostering of maternal-infant synchrony; and
- Lower crime recidivism by mothers.2

Prison nurseries have the potential to alter mothers’ working parenting models, and help their children sustain the stress of separation while maintaining healthy developmental trajectories.

Conclusions and Next Steps

Incarcerated mothers face re-entry worried about finding employment, housing, and childcare, locating community services, and with concerns about relationships, child behavior, and social isolation.2 For successful re-entry, prison programs must link to community agencies and incorporate outside health and social service expertise.

In correctional facilities, cross-professional conversations promote policy evaluation and change while addressing concerns about security, child welfare, and maternal psychosocial risks.2 Exploring prison nursery program alternatives, examining nursery eligibility requirements, and providing continuing education for prison personnel could help prison administrators develop best practices in their facilities.

Credible, effective, research-based interventions require collaborations between prison personnel and researchers. Because research on nursery outcomes is still new, further documentation of prison nurseries and alternative programs must continue in order to demonstrate their impact. Alternative to incarceration (ATI) programs are encouraging because they allow women to live and work in the community with their children of all ages while meeting sentence mandates. Studying ATI effectiveness also provides researchers with ripe opportunities for identifying new solutions through scientific investigation.

Legislation aimed at incarcerated women and their infants should be backed by financing and include funding for early, ongoing prevention efforts. Funding support and reproductive health education programs that prevent individuals from getting on the “pathway to prison” will do much to minimize incarceration rates and reduce the needless separation of children from their parents.

After mother and infant leave the prison environment, they return to their communities facing the same ecological risks from which the mother came. All mothers, including those who are incarcerated, merit support for positive parenting. Minimizing risks for babies who start their lives in a prison setting gives our youngest citizens the best opportunity not just to break generations of incarceration, but to thrive.

REFERENCES


Mary W. Byrne, PhD, MPH, NP, FAAN, is the Stone Foundation and E.D. Fish Professor of Health Care for the Underserved at Columbia University School of Nursing and Columbia University College of Physicians and Surgeons, Department of Anesthesiology. Sara Benning is the Director of Communications and Outreach at the Center for Leadership Education in Maternal and Child Public Health, Division of Epidemiology & Community Health, School of Public Health, University of Minnesota.
Healthy Beginnings in Difficult Environments: The William & Mary Healthy Beginnings Project

Women who spend time in correctional facilities are more likely than non-incarcerated women to experience medical and social risk factors including substance abuse, domestic violence, homelessness, under-education, divorce or separation, poor social support, and financial insecurity.\(^1\) As a result of these factors, incarcerated pregnant women are at higher risk than women from the community for giving birth to preterm and/or low birth weight infants.\(^2\)

The William & Mary Healthy Beginnings Project is an intervention and research program. Its interdisciplinary staff works in partnership with seven local jails in Virginia to improve the pregnancy outcomes of incarcerated women.\(^3\) To do this, intervention staff provide prenatal education, supply basic needs like prenatal vitamins, encourage healthy nutrition and lifestyle behaviors, and empower women to make informed decisions about their health, especially as it relates to preparing for motherhood. The program staff members also try to ensure continuity of care and support for women after their release, as they transition back into the general population.

The William & Mary Healthy Beginnings Project

The William & Mary Healthy Beginnings Project began in August 2012. Its ongoing intervention reflects two perspectives:

- **Incarceration** is an opportunity to provide health screenings and interventions to at-risk individuals; and

- **Pregnancy** provides a very specific opportunity to intervene with at-risk individuals to improve not only their health but also provide their offspring with the best possible start in life.

Intervention addresses the needs of incarcerated women through:

1. Pregnancy identification, by providing no-cost pregnancy tests to local correctional facilities in Virginia;
2. Supplying prenatal vitamins at no cost during and after incarceration;
3. Providing counseling, RN support, and referrals during pregnancy; and
4. Continuing counseling and support for women after they are released and re-enter the community.

Intervention Approach: From Pregnancy Testing to Postpartum

**Intake.** After women have been identified as pregnant, they are offered the opportunity to enroll in the William & Mary Health Beginnings Project. If they provide informed consent, they participate in an intake interview. The investigators use questions from the Pregnancy Risk Assessment Monitoring System survey for Virginia (PRAMS-VA) to collect background information, thus allowing them to compare the data from project participants with that of Virginia’s general population of recent mothers. Women also report on their nutrition and pregnancy-related knowledge at intake and after the nutrition education class. In addition, women are screened...
for depression and depressive disorders with the Center for Epidemiologic Studies Depression Scale (CESD-R) at the intake, post-counseling, and postpartum. 4

**Education.** Participants receive intervention at the second visit. Women receive nutritional counseling using resources like ChooseMyPlate.gov and the “Nutrition For You and Your Baby” participant handbook created for the William & Mary Healthy Beginnings Project. Nutritional counseling focuses on reading nutrition labels, understanding the differences between processed and whole foods, and the benefits of key nutrients during and after pregnancy. The nutritional counseling session also provides an important opportunity to connect with the participants on a personal level: interventionists discuss the universal need to nourish our bodies and stimulate conversation about food preference and habits.

Additional participant data are collected to help the interventionists provide individualized counseling and referrals. The individual problems, interests, and needs of the participants are diverse. Counseling and referral topics range from Medicaid enrollment, WIC enrollment, obtaining a free car seat, homelessness, domestic violence, nutrition, child placement services, breastfeeding assistance, locating OBGYNs/pediatricians, and birth planning. The average length of incarceration in local correctional facilities for project participants is just 11 weeks, so the intervention must be both timely and individually tailored to have the maximum positive impact.

The post-counseling session is the third meeting, which provides follow-up from the nutrition education class. Ideally it occurs a month after the nutrition intervention. Additional data are also collected about eating habits and nutrition (including fruit and vegetable intake) and post-test nutrition and pregnancy-related knowledge. The CESD-R depression screening is repeated in this session.

The fourth and final session is the postpartum interview. The interview typically takes place outside of the jail setting because about 75% of the participants deliver their infants after they are released. At the last intervention and data collection interview, the PRAMS-VA and CESD-R are administered one final time. Data are also collected about the study infant, including sex, gestation at birth, birthweight, birth complications, and breastfeeding status and intentions.

**Project Participants**

Since Healthy Beginnings started in 2012, more than 200 pregnant women have been identified in local jails in Virginia and 170 have participated in the project. The average age of participants was 25.7 years (range 19–41 years) and, on average, they had completed a 10th grade education. On average, participants were 18.5 weeks pregnant at intake, with a range of 2–36 weeks. Twenty-four percent learned that they were pregnant in jail. Table 1 shows the high socioeconomic and health risks of the participants.

### Table 1. Characteristics of 170 William & Mary Healthy Beginnings Project Participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Percent of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>50%</td>
</tr>
<tr>
<td>White</td>
<td>45%</td>
</tr>
<tr>
<td>Single, divorced, or without a partner</td>
<td>90%</td>
</tr>
<tr>
<td>Homeless in past 12 months</td>
<td>23%</td>
</tr>
<tr>
<td>Have someone who could loan participant $50 in an emergency</td>
<td>79%</td>
</tr>
<tr>
<td>Prior to incarceration lived in a USDA-defined food dessert</td>
<td>49%</td>
</tr>
<tr>
<td>Had a previous birth</td>
<td>76%</td>
</tr>
<tr>
<td>Of those (n=128) ever had low birthweight infant</td>
<td>15%</td>
</tr>
<tr>
<td>Of those (n=128) ever had preterm infant</td>
<td>16%</td>
</tr>
<tr>
<td>Current pregnancy unplanned</td>
<td>82%</td>
</tr>
<tr>
<td>Three months prior to pregnancy:*</td>
<td></td>
</tr>
<tr>
<td>Smoked cigarettes</td>
<td>83%</td>
</tr>
<tr>
<td>Drank alcohol regularly</td>
<td>76%</td>
</tr>
<tr>
<td>Used illicit or prescription drugs immediately before pregnancy*</td>
<td>68%</td>
</tr>
<tr>
<td>In the month prior to pregnancy, took prenatal vitamins*</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Compared to non-incarcerated community women in the Williamsburg, VA area, participants had significantly lower rates of prenatal vitamin use; higher rates of pre-conception cigarette smoking and drug use; and no difference in pre-conception alcohol consumption rates.
As of November 2014:
- 170 pregnant women agreed to participate;
- 143 women received intervention counseling;
- 114 provided post-counseling data;
- 97 gave birth and provided postpartum data; and
- 25 had not yet given birth.

**Intervention Effects: Knowledge, Depressive Symptoms, and Birth Outcomes**

There is strong evidence that participants gained pregnancy-related and nutrition knowledge. During pre-counseling and intake, participants did significantly worse than community women drawn from the Williamsburg area on a test of nutrition and pregnancy knowledge. When measured again at post-counseling, participants performed as well as their community peers.

There is also evidence of change in depressive symptoms. Women who were screened with the CESD-R and had a score at or above sixteen were considered to be depressed. Women scoring above the clinical range decreased across time points: at intake 63.1%, post-counseling 55.8%, and at postpartum, 39.7% had such scores.

More than 70% of participant births occurred after women were released from local correctional facilities. Healthy Beginnings provides an important point of continuity in pregnancy support. Such support is critical because of the social disadvantages of many of the participants. Of the 97 women who had completed postpartum data collection, 55.1% had attempted breastfeeding.

The average birthweight of their infants was 7lbs, 1oz. Three infants were born small for gestational age (SGA) and 13 were born large for gestational age (LGA). The percentage of low birthweight and preterm births were close to those of Virginia women overall (Table 2), despite the overall high-risk status of program participants.

**Future Directions: Extend Service to Participants and Envision State Policy Change**

In the short-term, William & Mary Healthy Beginnings Program will continue to provide pregnancy testing and prenatal vitamin resources to its partner correctional facilities. A mid-term goal is to build on its relationships with participants and to extend support to them and their families for up to the first three years of the study infant’s life. This will allow investigators to quantify and understand the longer-term effects of the intervention by gathering data on later infant/child development.

The fact that interventions like Healthy Beginnings are needed in jails and prisons is a sign that the policies related to the health care and education of incarcerated pregnant women must be modified. Thus, the long-term goal of the project researchers is to develop an evidence base from which to advocate for policy change in Virginia. Such change would entail providing more systematic screens for pregnancy, educating health care workers and correctional staff, and creating stronger partnerships between correctional facilities and local health departments and home visiting nursing programs to foster continuity of care and re-entry support for women and their newborns.

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**Table 2. Birth outcomes of 97 William & Mary Healthy Beginnings Project Participants, as of November 2014**

<table>
<thead>
<tr>
<th>Birth Outcome</th>
<th>Project Participants</th>
<th>State of Virginia*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low birthweight</td>
<td>7.5%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Preterm</td>
<td>12.0%</td>
<td>11.0%</td>
</tr>
</tbody>
</table>

*Data for 2012 for all Virginia residents, from Kids Count Data Center, http://datacenter.kidscount.org/

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**For More Information**


**Program Funding and Support**

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**REFERENCES**


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Danielle Dallaire, PhD, is the principal investigator for the William & Mary Healthy Beginnings Project. She is an Associate Professor of Psychology at the College of William & Mary in Williamsburg, VA, where she is the Robert and Jane Sharp Professor of Civic Renewal. Zachary Holmquist is an MPH student in the Maternal and Child Health Program in the School of Public Health at the University of Minnesota Twin Cities. Caroline Kelsey is a graduate student in psychology enrolled in the MA program at the College of William & Mary.
Today, at the Minnesota Correctional Facility (MCF)-Shakopee, there are 660 incarcerated women. As the state’s only women’s prison, MCF-Shakopee houses women at all custody levels (minimum to maximum). A majority of the women at MCF-Shakopee are of reproductive age and more than half are mothers of minor children. Like many states, data on the number of women who are pregnant at intake are not systematically collected; however, national estimates suggest that 3–4% of women in state and federal prisons are pregnant at intake.¹

One of the authors (Shlafer) recalls vividly the first night she attended a group session at the women’s prison. The facilitator asked a powerful check-in question: “What’s your biggest fear about being a parent?” As they went around the room, the group got to the last woman; she was visibly pregnant and had a tired and defeated look in her eyes. “My biggest fear about being a parent is that I’m gonna be no better to my baby than my mama was to me,” the woman said. The facilitator gently probed, “How are you doing with that?” The woman quietly replied, “I’m not beating my baby, but I’m pregnant and in prison, so I don’t really know how I’m doing…”

“I’m not beating my baby, but I’m pregnant and in prison, so I don’t really know how I’m doing…”

Isis Rising: A Prison-based Pregnancy and Parenting Support Program

Recognizing the unique needs of pregnant women in prison, Isis Rising provides prenatal education and parenting support with the goal of improving maternal, fetal, and infant health. The impetus for the program came nearly a decade ago, when one of the authors (Gerrity) was working as a graduate intern at the prison and observed a significant lack of attention and concern for pregnant women. She created an informal survey and held talking circles in which women were able to express their thoughts, concerns, and hopes for parenting while in prison. Through these groups, Gerrity aimed to understand the women’s strengths and needs, as well as the current resources and potential opportunities for action.

In 2010, the prison granted permission for Isis Rising staff to facilitate weekly support groups for pregnant women and mothers.
with young children. Later that year, doula support was approved and the program initiated a formal collaboration with Shlafer at the University of Minnesota. This first year provided an opportunity to reassess and refine the program’s model based on pilot data; Gerrity’s clinical observations; and women’s informal feedback about the structure, format, and content of the program. Today, the program consists of two interrelated components: (1) a 12-week support group for pregnant and postpartum women and (2) doula support.

Through weekly, two-hour group meetings, trained facilitators aim to increase women’s knowledge about reproductive health and the physiology of pregnancy and birth; increase women’s tangible parenting skills and life skills; and increase women’s support from peers and Isis Rising facilitators.

Each week, the facilitators introduce an educational component, addressing topics like diet and weight gain during pregnancy, stages of labor, attachment and bonding, and self-care. Beyond the educational elements, the facilitators aim to create a group space in which they can model empathy, encourage accountability, and support healthy communication among group participants.

In addition to group-based support, pregnant women are matched with a trained doula who provides physical, emotional, and informational support before, during and after birth. Before the birth, the doula meets twice with the woman to provide prenatal education, emotional support, and assistance with preparing a birth plan. When the woman is transferred to the local hospital for delivery, the doula meets the woman at the hospital where she provides emotional support, physical comfort, and assists the woman with making informed decisions during labor and delivery. When the mother is scheduled for discharge—approximately 48 hours after delivery—the doula returns to the hospital and provides emotional support to the mother as she is separated from her infant. After the mother returns to prison, the doula conducts two postpartum visits during which she provides emotional and informational support.

**Isis Rising Participants**

Through this community-university partnership, the characteristics and outcomes of Isis Rising participants have been documented. Between July 2011 and June 2014, 39 pregnant women received group-based support and were matched with an Isis Rising doula. These women ranged in age from 18–41 years old (average 28.5 years) and had completed, on average, 11.6 years of education. These program participants came from rural communities, urban centers, and other states from around the country. About one-third (36%) were Caucasian and one in four were Black or African American. Although many have other children, some women were experiencing their first pregnancies while incarcerated. Some women did not know they were pregnant until they came to prison. Many of the Isis Rising participants (63%) reported a history of domestic violence; most (79%) reported a mental health diagnosis, and a substantial proportion (21%) reported a chronic health condition.

The program evaluation shows that group-based support is associated with a number of positive outcomes. After 12 weeks of group support, women reported significantly fewer depressive symptoms, more confidence as parents, more support from other women at the prison, and more support from prison staff. Further, women report very high levels of satisfaction with their participation and with the support they received from Isis Rising staff.

One-on-one doula support is also associated with positive outcomes. Of the 39 women who delivered with doula support between July 2011 and June 2014, all delivered singletons and only four (10%) were via cesarean delivery. None of the infants had low birthweight or were delivered preterm. The initial results are promising because they are better than Minnesota birth outcome data for the general population, even though incarcerated women are at disproportionate disadvantage. In Minnesota, the primary cesarean delivery rate was 18% in 2012;² about 10% of infants were born preterm;³ and low birthweight in term singleton infants was 1.8% in 2011.³

**The Expansion of Isis Rising**

While there are data for only 39 births, the program is encouraging for several reasons: birth outcomes have been good, women have been satisfied with the program, and corrections staff have been supportive. We know that incarcerated pregnant women are of higher socioeconomic disadvantage and thus enter their pregnancies at higher risk than women in the general population. The program was designed to address those risks, through education and support. A long-term goal is to give infants born to incarcerated women a healthy start. Isis Rising is expanding its work beyond the state’s prison to pregnant women incarcerated in Minnesota county jails. Over the last year, services have been provided to pregnant women in Hennepin and Ramsey county jails. Such women have similar sociodemographic profiles to women in prison, but the opportunities for intervention are different because they may be jailed for only a few days to several months. If Isis Rising is successful in the two largest county jail systems in Minnesota, the hope is to further extend this program to jails throughout Minnesota. As the articles in this volume show, Isis Rising is one of several interventions for incarcerated pregnant women in the US. Collectively, researchers and educators are sharing their data and their ideas to improve the health outcomes for these women. Isis Rising provides a strong prototype of a relatively low cost, feasible, and potentially effective intervention that could be applied in a variety of jail and prison settings.

**For More Information**


**REFERENCES**


**Rebecca Shlafer, PhD**, is an Assistant Professor in the Department of Pediatrics and Adolescent Health in the Medical School at the University of Minnesota. Erica Gerrity, LICSW is the Program Director of Isis Rising.
Conducting Research in Prison Settings: Challenges and Solutions

All researchers face challenges, but for those conducting research in corrections settings, the challenges are compounded by safety issues, institutional regulations, and physical and logistic constraints. The following describes some of these challenges and recommendations to address them.

Because correctional facilities can be dangerous environments for incarcerated individuals and staff members, the primary priorities of corrections administrators are safety and security. Such priorities—as well as the unique characteristics of the environment and of incarcerated women—present challenges to those who conduct research in correctional facilities. While the following considerations are not all unique to the prison or jail setting, they are often more common or exaggerated than they may be in research projects with free-living individuals.

Administrative, Logistical, and Practical Considerations

Paperwork and permissions. Researchers need to receive approval for any study they conduct from their home institution’s Institutional Review Board (IRB). Researchers who work with incarcerated populations also usually need permission from a corrections governing agency or a correctional facility’s IRB. In addition, some researchers may seek a federal Certificate of Confidentiality for their work with incarcerated individuals. This certificate legally protects researchers from “involuntary disclosure” (e.g., subpoenas) of names and other identifying information about research participants. Researchers are advised to apply for the certificate at least three months before they plan to contact research participants.

After data collection, researchers must often get correctional facility/administration permission before sharing any results or information about the study (e.g., presentations, publications, external reports) publicly. While this likely varies, permission may extend to approval of messages and data dissemination, which could introduce some censoring or interpretation of the data that may not occur in research in other settings.

Limited access to participants. Researchers must often weigh their data collection needs with the limited amount of time they may have with incarcerated participants. “I would love to give a much more comprehensive survey…but at the end of the day the paperwork takes away from their time in group. The research is less important than the support they need,” said Rebecca Shlafer, PhD, an Assistant Professor in the Department of Pediatrics at the University of Minnesota.

Establishing trust with incarcerated individuals and prison personnel takes time. Many incarcerated individuals have histories of abuse and trauma, which may contribute to distrust of the criminal justice and social service systems. Having all of the necessary paperwork processed and a signed consent form in hand does not mean that...
incarcerated individuals will feel comfortable talking to researchers or that they will fully disclose requested information.¹

There are both informal and formal mechanisms to build trust with prison and jail staff. The informal mechanisms of relationship building, mutual goal-setting, and identifying ways to collaborate, are common in all community-centered research. Unlike other research settings, though, there are often institutional protocols to assess the background of the researcher, including fingerprinting and a background check.¹ Once researchers are allowed access to a correctional setting, they may also have to participate in an orientation process to ensure that they understand the facility’s rules and regulations.³

Sparse resources and interruptions or delays in research funding. Because they are a low priority with large funders, many studies of incarcerated people have limited funding, which means that a small research staff will conduct a large project in a complex environment. This makes longitudinal studies (i.e., designed to have more than one contact with a participants) particularly difficult because of the resources needed to follow-up with participants who are released, deported, or transferred to other facilities, sometimes with little or no notice.

Researchers also often depend on external sources for funding (federal, state, local, or private). They cannot always be sure when funding will be secured, thus researchers’ efforts to obtain permissions and build trust may be weakened if they cannot start projects when they promise to do so. Similarly, research funds can be unreliable: for example, a 3-year study could be reduced to two years, with little notice, if funder sources are unexpectedly low or if funder priorities shift. Researchers may also not be able to complete a study within a funding cycle, thus having to stop an incomplete study while they try to obtain additional funds. These interruptions and delays cannot always be predicted and may result in study failure, given the transience of incarcerated people and the many time-sensitive permissions necessary to conduct research with them.¹

Population- and environment-specific issues constrain research methods. In intervention studies, randomization of participants to intervention and control groups often produces superior results if the two groups are similar except for their exposure to the intervention. It is very difficult to do this kind of intervention in a prison or jail setting because of a research challenge called “contamination”: individuals who live in such close proximity to one another can easily share information with another person, including information about the intervention.¹ This is especially relevant if the intervention is mostly educational, as studies in other close settings (e.g., schools) show that intervention participants will share educational materials and new knowledge with control participants, even if advised not to do so.

Another difficult research design is a longitudinal one that involves measuring outcomes over time. This requires sufficient staff and information to contact participants who remain eligible for the study even if they are transferred to other facilities or have been released from incarceration. In the latter case, formerly incarcerated individuals may be hard to locate because they are highly mobile and/or may not be located through traditional means (e.g., family members, home ownership records, employment).³ Some individuals who re-enter community life may also re-engage in illegal activities and may intentionally avoid institutional contact.

Even conducting a one-time survey with incarcerated individuals can be a challenge because prison schedules are strict and shift unexpectedly, making it difficult to schedule interviews or conduct testing. For example, if there is an institutional lock-down on a data collection day, the researcher will not be able to enter the facility. The research process is also made more difficult when things like digital recorders and stapled papers are considered contraband and are not allowed inside some correctional facilities. Finally, participant confidentiality is difficult to maintain if there are no areas to conduct one-on-one data collection in facility.¹

Research staff may be uncomfortable conducting study tasks. Data collectors and interventionists who are hired for research studies may not be familiar with prison or jail settings. Their early experiences with such settings may be emotionally challenging and uncomfortable. The settings are often loud and they may be crowded, bleak, frightening, or physically

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**Sources of data about incarcerated individuals in the United States**

The Bureau of Justice Statistics (BJS) is the primary resource of incarceration data in the US (http://www.bjs.gov). BJS provides comprehensive reports on incarceration, probation and parole, youth in detention, mortality and health of incarcerated people, sexual victimization, types of arrests and sentencing, etc. Among the data sources used by the BJS are:


For a full list of BJS data resources and projects, go to http://www.bjs.gov/index.cfm?ty=dca
unaccommodating. Research staff may also find they have extreme and diverse feelings about research participants, including compassion, fear, anger, and sorrow. Research staff members may thus require more training than other research staff to build comfort with the environment and the participants. They may also require more opportunities for de-briefing because of the logistical and, perhaps, emotional challenges of conducting a study in an environment where safety and security are necessary concerns.

**Successfully Working in Prison and Jail Settings**

With all of these challenges, researchers are still successfully conducting research in prison settings. Below are ways in which they do so.

**Collaboration.** Successful researchers build trust and rapport with correctional staff, including wardens as well as civilian and medical staff members. Doing this during the early stages of the research process contributes to staff buy-in, especially if staff members help to identify research priorities and needs. Not only could corrections staff members make valuable contributions to a feasible and relevant research design, they can also educate researchers about the corrections hierarchy. Understanding institutional decision-makers and influencers is especially valuable when researchers need to push time-sensitive paperwork through appropriate channels or make modifications in the original design or protocols that need immediate approval. Effective collaborations also help to develop a workable participant recruitment plan and to locate transferred or released participants.

**Build an understanding of the correctional system.** Researchers must understand the correctional system, just as they must understand any environment in which they work. Many prison researchers began their work by building their general knowledge about the criminal justice system. In terms of developing an understanding of their specific research site, researchers rely on direct observation and regularly consulting with those working in the prison system, criminal justice scholars, other prison researchers, and current or former incarcerated individuals. Understanding and respecting strict institutional schedules and routines help implement research protocols (e.g., knowing when to schedule participant interviews).

**Have a solid research plan.** It is not enough to have a good research plan. The researcher must also know how to translate its various components to corrections staff and participants using everyday language. Flexibility is crucial to working with prison populations, said Shlafer. “The sheer timeline of the research and the expectations for how long the process might take is really a challenge,” she said. “We have to be flexible in a highly structured system. I’ve had had to make some concessions and ask myself what is feasible in this environment.”

Providing incentives to research participants is common in all settings. “We must respect the rights of all potential research participants to refuse to participate and sensitivity to this right is especially relevant for vulnerable populations...There must be no coercion,” said Mary Byrne, PhD, Stone Foundation and Elise Fish Professor of Health Care for the Underserved at Columbia University’s School of Nursing. “Some of the things that motivate prisoners to choose participation have included: their altruistic desire to help others learn from their experiences, gifts given to the children from whom they are separated (good quality books have been particularly valued), photographs and videotapes of women with their children (sent to designated family or saved to be given to the mother on release when she is not permitted to have these in the correctional setting).”

To minimize risk and protect the well-being of the research participant, researchers should provide informed consent in alternate formats, including verbal. As part of informed consent, researchers must ensure that potential participants understand that they must tell prison authorities if incarcerated individuals reveal information during the study that suggests that they are a threat to themselves or others, being abused, using substances, or planning to escape.

Part of the solid research plan is having a mechanism for following participants, if the

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**National Listserv for MCH Students & Grads**

A listserv for current and past Maternal and Child Health (MCH) students (from all disciplines) was made available by the Maternal and Child Health Bureau through the Association of University Centers on Disabilities. This listserv will allow MCH graduates and students to continue the strong connections they have made during their graduate programs and connect with MCH-ers from other disciplines and programs. This listserv is a great opportunity for members to collaborate on research, to network, and to share practices and questions with peers. The listserv subscription form and more information is at: [http://www.aucd.org/resources/alltrainee_subscription.cfm](http://www.aucd.org/resources/alltrainee_subscription.cfm)
Healthy Generations

research design requires it. Researchers must thus gather contact information early in the research process in case study participants are discharged with little or no warning.1

Treat incarcerated individuals as collaborators. Some researchers have found it helpful to partner with influential incarcerated individuals to facilitate study conduct. Such individuals, who are respected by other incarcerated individuals, can provide legitimacy to a research project, help recruit participants, provide insight about the best times to collect data, and help pilot-test research materials, like questionnaires.3 Incarcerated individuals can also provide experience-based guidance for future studies or interventions. For example, Shlafer credits the women at the Minnesota Correctional Facility (MCF)-Shakopee for identifying the need for the prison-based prenatal and parenting support program, Isis Rising. Since program implementation, they have continued to influence it.4 “If they see concerns about nutrition and diet, the next week the content is guided by that,” said Shlafer.

Shared Knowledge Will Facilitate Future Studies

Every study environment needs to be understood for good research to occur. There are several national and international researchers, from many disciplines, who have focused their work on the health and social experiences of incarcerated individuals. As their work grows, so has our understanding of best research practices. In October 2014, the Center for Leadership Education in Maternal and Child Public Health convened an institute to discuss one many health care concerns (reproductive health) for incarcerated women. The institute involved nationally respected researchers and local corrections, public health, social work, education, and nursing professionals (http://z.umn.edu/10202014institute). Collectively, institute speakers and attendees shared their challenges, their successes, and their commitment to developing an evidence base to inform future interventions and programs for incarcerated individuals. While, there is much left to be learned, research is at the point where there is also a great deal of existing knowledge developed by individuals in the academic institutions, in health care settings, and in correctional facilities and agencies.

REFERENCES


Sara Benning, MLS, is the Director of Communications and Outreach at the Center for Leadership Education in Maternal and Child Public Health, Division of Epidemiology & Community Health, School of Public Health, University of Minnesota. Wendy L. Hellerstedt, MPH, PHD, is the Director of the Center for Leadership Education in Maternal and Child Public Health and an Associate Professor in the Division of Epidemiology & Community Health, School of Public Health, University of Minnesota.

MPH DEGREES AND CONTINUING EDUCATION

University of Minnesota Maternal and Child Health

MPH Degree Offerings

For more information: http://sph.umn.edu/programs/mch/

Our students come from a variety of backgrounds, but share a focus on social justice and public health principles. They assume leadership roles in nonprofits, research settings, public health agencies, and healthcare organizations.

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- A 42-credit distance education (online) MPH for individuals with an advanced degree or at least 3 years’ experience in a MCH-related field. All students pay in-state tuition
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- Dual degrees in law or social work

* Conventional students may select a concentration in global health, policy, or health disparities.

Training, workshops, and seminars are sponsored by the Center for Leadership Education in Maternal and Child Public Health to address ongoing training needs of professionals.
Challenges to Providing Health Care to Incarcerated Women

There are complications in providing services to incarcerated women, especially those who are pregnant, have just given birth, or are entering custody after the birth of their child. There are disparate resources—and thus differences in care—for incarcerated women in Minnesota’s 84 county jails and one state prison. Professionals working at jails, which are locally operated, short-term facilities, and prisons, which are long-term facilities for felons with sentences of one year or more, have to keep abreast of the many community health service options available to women upon release. This can make continuity of care challenging, especially when many women are underinsured or uninsured and don’t have established care prior to or after release.

A Jail Perspective

Diane Haugen is the Clinical Services Division Manager at Saint Paul-Ramsey County Public Health. It is one of the largest local public health departments in Minnesota and the provider for health services in the four Ramsey County correctional facilities. Ms. Haugen would like county correctional health nursing staff to connect with each pregnant incarcerated woman while they are in jail. This is challenging when the average stay for women in Ramsey County jail is 72 hours and staff may not be aware that a woman is pregnant during her brief stay.

In Minnesota county jails, every woman receives a health screening upon intake which includes questions about pregnancy. Correctional health staff members review these intake screenings. However, jails have varying levels of correctional health staffing due to jail size and budgets, making follow up with pregnant individuals, and/or offering pregnancy testing, challenging. For example, in a small jail with limited nursing hours, a woman who goes to jail on a Friday and is released the following Tuesday, may not have the opportunity to connect with nursing staff. Knowing she’s pregnant can help a woman access proper nutrition and medical services while incarcerated.

Providing those medical services can be challenging when there are not enough nurses on staff, says Holly Compo, a Public Health Nurse. However, the multidisciplinary team at Saint Paul-Ramsey County Public Health helps to bridge the gap.

“Corrections staff are doing triage, which includes making immediate medical decisions.”

Working with Incarcerated Individuals: Balancing Security, Safety, and Health Care

How do those working on the frontline with incarcerated pregnant women balance concerns about safety and security with the health care and pregnancy support needs of mother and infant? Four professionals came together to talk about just that at the October 20, 2014 “Interdisciplinary Institute on the Reproductive Health of Incarcerated Women in Minnesota” at the University of Minnesota. Some of the unique challenges and solutions encountered by those working with Minnesota’s incarcerated women and their families are outlined below.
A County Service Provider Perspective

With 1.2 million residents (approximately 22% of Minnesota’s population), Hennepin County is the state’s largest county, allocating about 44% of its budget to health and human services. Hennepin County’s Project CHILD (Chemical Health Intervention, Linkage, and Development) program is designed to reduce prenatal substance exposure and to promote child protection through early-intervention case management services. Erika Jensen, a licensed social worker with Project CHILD, talked about the high numbers of women coming into corrections addicted to derivatives of benzodiazepine (e.g., commonly prescribed anti-anxiety medications) and opiates (e.g., methadone, morphine, heroin, codeine, oxycodone), making maternal (and possibly, neonate) withdrawal a major concern. Withdrawal can increase the risk of spontaneous abortion, miscarriage, and preterm labor, so early screening for chemical abuse and pregnancy screening is critical. In a jail setting, it can be difficult for addicted women to get therapeutic access to methadone unless it has previously been prescribed. Helping women get access to medicated-assisted withdrawal treatment can help reduce the risks for the mother, fetus, and neonate. For the many women struggling with substance abuse, “Five days waiting for a court date could mean the difference for mother and baby,” Jensen said, “If there’s a lapse, that can be enough time for risk to happen.” One solution to this is contracting with local methadone treatment centers, which could provide jails with readily accessed experts to help women who are going through withdrawal.

Encouraging women to access Project CHILD, a voluntary program, can be difficult because they often are referred to it through Child Protective Services. This referral may result in women being reluctant to engage with Project CHILD if they do not perceive it as independent of Child Protective Services. According to Jensen, helping to alleviate the fears and anxieties that come with the stigma of being reported to Child Protective Services—and assuring them that their participation in Project CHILD is voluntary—are key to getting mothers to access the program.

Conclusion

Professionals are working to improve the health conditions of incarcerated individuals and recognize the specific complications of providing services to pregnant and parenting women. In jail and in prison settings, pregnant women may also be at higher risk than such women in the general public, because of higher rates of social problems and chronic conditions. Corrections health professionals must not only attend to immediate pregnancy related needs, but also facilitate access to community resources after women are released.

Professionals are working diligently to improve conditions for pregnant mothers while they’re incarcerated and as they reenter their communities. However, without appropriate human and financial resources, these dedicated professionals will continue to struggle with addressing the many needs of one of Minnesota’s most vulnerable populations. With continued collaboration
For More Information

1. To hear the full panel discussion about challenges and opportunities working with incarcerated women, please go to http://z.umn.edu/10202014institute


REFERENCES


Sara Benning, MLS, is the Director of Communications and Outreach at the Center for Leadership Education in Maternal and Child Public Health, Division of Epidemiology & Community Health, School of Public Health, University of Minnesota. The following individuals were quoted in this article: Guy F. Bosch is the Associate Warden of Operations at the Minnesota Correctional Facility-Shakopee. Holly Compo, RN, PHN, is a registered nurse for the Carlton County Jail and works with the Personal Care Assistant (PCA) Program in Carlton County. Diane C. Haugen, RN, PHN, CCHP, is the Clinical Services Division Manager at Saint Paul-Ramsey County Public Health. Erika Jensen, MSW, LGSW, LADC, is a licensed social worker at Hennepin County’s Project CHILD (Chemical Health Intervention, Linkage, and Development).
Mandatory Pregnancy Testing of Incarcerated Women: Is It Constitutional?

by Bradford Colbert, JD, and Sydney Silko

Every health issue involving incarcerated individuals involves a legal question. We asked two experts to share their opinion about the constitutionality of mandatory pregnancy testing. From a public health perspective, we may argue that it is in the best interest of a pregnant incarcerated woman that her status be known, so corrections health staff can provide needed services and care. However, there are other important considerations, as discussed in the following article by Bradford Colbert and Sydney Silko.

Although the overall rate of incarceration has fallen recently, the incarceration rate for women has increased substantially over the last few years. The number of women in prison increased by 646% between 1980 and 2013, rising from 15,118 to 111,287. Including women in local jails, about 213,700 women were incarcerated in the United States in 2013.

With more women in the prison system, several issues that are unique to women inmates have become increasingly critical to address; one of those issues is pregnancy. It is estimated that four percent of women who enter state or federal prisons and five percent of those who enter jails are pregnant.

Given the number of pregnant inmates, an important issue is whether to mandate pregnancy testing. Depending on the perspective with which one views this issue, different considerations arise. From the healthcare perspective, identifying pregnant women is important so that maternal and fetal health can be properly addressed. From a privacy perspective, pregnancy testing is an intimate matter and should be left to the woman to decide if and when she takes a test. From a legal perspective, forcing a woman to undergo pregnancy testing could violate her constitutional rights.

The Constitutional Rights of Incarcerated Individuals

Prisoners have not always had constitutional rights. Early on, prisoners were considered slaves and had no rights; they were, in essence, civilly dead. The concept of prisoners' rights changed, like everything else, in the 1960s. The US Supreme Court famously recognized that, while a prisoner's rights may be diminished by the needs and exigencies of incarceration, "there is no iron curtain drawn between the Constitution and the prisons of this country." It is now well accepted that the Constitution protects inmates, albeit to a lesser extent than non-inmates. Generally when determining whether a government regulation has infringed on a person's constitutional rights, the courts will strictly scrutinize the regulation; but for inmates "when a prison regulation impinges on inmates' constitutional rights, the regulation is valid if it is reasonably related to legitimate penological interests."

One constitutional protection is the Fourth Amendment's prohibition of "unreasonable" searches. A search is unreasonable when it is not justified under the circumstances or is made in an improper manner. "To determine whether such a search is..."
“justified,” courts apply a balancing test. The balancing test examines the totality of the search's circumstances and balances: (1) the intrusion of the search upon the individual's right to privacy against (2) the degree to which the search is needed to promote a legitimate government interest. In the context of a prisoner’s rights, the prison regulation must be reasonably related to legitimate penological interests.

Mandatory pregnancy testing constitutes a Fourth Amendment search and therefore, to be constitutionally sound, must be reasonable. To determine whether mandatory pregnancy testing is reasonable, the intrusion of the pregnancy test upon an incarcerated woman’s right to privacy is balanced against the degree to which the test results are needed to promote a legitimate government interest. If the government’s interest outweighs the inmate’s right to privacy, then mandatory pregnancy testing is constitutionally permissible.

Uncertainty About the Constitutionality of Mandatory Pregnancy Testing

The issue of whether mandatory pregnancy testing of inmates is an unwarranted governmental intrusion has not been widely litigated. As a result, it is impossible to provide a definitive answer as to whether mandatory testing is constitutional.

There is no question that issues involving family and procreation are deeply intimate and implicate a constitutional right to privacy; therefore, these issues are generally protected from unwarranted governmental intrusion. It is difficult to imagine a more emotionally complex subject than pregnancy testing—specifically pregnancy testing of incarcerated women. If the pregnancy test turns out to be positive, the woman will have to evaluate whether she is prepared and willing to be a mother, and, if not, whether termination or adoption is appropriate and feasible. This is an incredibly difficult decision at any time, but it is especially difficult for someone who is incarcerated with limited access to her family and friends. Moreover, the results of her pregnancy test are likely included in her file and made available to personnel, and potentially other inmates. If a woman wants to keep her reproductive status private, she should be able to do so. Mandatory testing would eviscerate her right to privacy.

The woman’s legitimate right to privacy must be balanced against the government’s interest. The prison or jail has an interest in quickly identifying each incarcerated person’s medical needs, including any specific health issues. Determining the pregnancy status of female inmates allows the prison or jail to properly address both maternal and fetal needs. Pregnancy requires special care, such as routine medical appointments and a well-balanced diet. These needs can only be met if it is first determined that the woman is pregnant. The earlier the pregnancy is detected, the better the likelihood of proper fetal development.

Another factor that must be considered is the legal status of the inmate. If a woman is pre-conviction—that is, she has been arrested but not yet convicted of a crime—she is presumed to be innocent. Because she is presumed innocent, a pre-conviction inmate’s rights are more expansive than a woman who has been convicted. If a woman is post-conviction, she has been sentenced to serve time in prison or a workhouse and is no longer presumed innocent. Her rights are more limited as a result of her new relationship with the state. Due to the difference between a presumption of innocence and a conviction of guilt, forcing a pre-conviction inmate to take a pregnancy test is clearly unconstitutional. However, forcing a post-conviction inmate to take a pregnancy test may be constitutional.

Opting Out

Just because it may be constitutionally permissible for a prison to conduct mandatory pregnancy testing does not necessarily mean the prison should conduct mandatory testing. An incarcerated woman should be permitted to opt-out of taking a pregnancy test if she so chooses.

Realistically, the vast majority of female inmates will agree to, and may even request, a pregnancy test. For some, however, being forced to take a pregnancy test may feel like a substantial violation of privacy. A pregnancy test is a significant search that reveals the most intimate information imaginable; it deserves the utmost respect and deference to privacy. Mandatory pregnancy testing diminishes a woman’s ability to control the dissemination of her medical status and history as she sees fit. It interferes with personal choice, which is central to personal dignity and autonomy. Moreover, pregnancy testing falls under the category of procreative decision-making, which the Supreme Court has ruled is within a protected “zone of privacy” that must be respected under the Constitution.

Finally, while the clinical discussion about the care of pregnant inmates goes beyond the scope of this article, it is important to note that mandatory pregnancy testing is not recommended from a healthcare perspective. The American College of Obstetricians and Gynecologists (ACOG) released an opinion report on the care of pregnant and postpartum incarcerated women, wherein it recommends routine assessment of pregnancy risk through menstrual and contraceptive use history, with testing for pregnancy “as appropriate.”

Health care delivered in jails and prisons should meet the community standard of care and adhere to evidence-based guidelines established by credible health care organizations, such as ACOG.

With such a sensitive and personal topic, it is important that an inmate’s right to privacy in family and procreation is honored. Although the constitutionality of mandatory pregnancy testing has not been definitely decided, in our opinion, every inmate should be given the opportunity to opt-out of pregnancy testing.

NOTES


9. Mell, 757 N.W.2d at 710 (citing Samson v. California, 547 U.S. 843, 848 (2006)).


12. Maureen J. Mann, Overlooking the Constitution: The Problem with Connecticut’s Bail Reforms, 24 Conn. L. Rev. 915, 942 (Spring 1992) (“[A]n accused is presumed to be innocent until his guilt is established by the evidence beyond a reasonable doubt.”).


14. See In re Welfare of C.T.L., 722 N.W.2d 484, 492 (Minn. Ct. App. 2006) (concluding that the privacy interest of a person who has been charged with but not yet convicted of a crime is not outweighed by the state’s interest in taking a biological specimen from the person for the purpose of DNA analysis).

15. Compare In re Welfare of M.L.M., 781 N.W.2d 381 (Minn. Ct. App. 2010) (concluding that a juvenile who has been convicted of a misdemeanor does not have a fundamental right to be free from DNA collection for the purposes of identification) with Gruenke v. Seip, 225 F.3d 290 (3d Cir. 2000) (absent unusual circumstances, a school official’s alleged administration to a student athlete of the pregnancy tests would constitute an unreasonable search under the Fourth Amendment).


Bradford Colbert, JD, is the Director of Legal Assistance to Minnesota Prisoners at William Mitchell College of Law. Sydney Silko is a Certified Student Attorney with Legal Assistance to Minnesota Prisoners and JD Candidate (2015) at William Mitchell College of Law.

WEB RESOURCES: INCARCERATION AND REPRODUCTIVE HEALTH

The following websites—and those listed at the end of several articles in this volume—provide resources about incarceration and related public health program or policy.

Bureau of Justice Statistics (BJS)
http://www.bjs.gov

The Bureau of Justice Statistics (BJS) collects, analyzes, publishes, and disseminates information on crime, criminal offenders, victims of crime, and operation of justice systems at all levels of government. These data are critical to federal, state, and local policy makers in combating crime and ensuring that justice is both efficient and evenhanded.

Interdisciplinary Institute on the Reproductive Health of Incarcerated Women in Minnesota Resources
http://z.umn.edu/102014resources

The October 2014 Interdisciplinary Institute on the Reproductive Health of Incarcerated Women in Minnesota was sponsored by the Center for Leadership Education in Maternal and Child Public Health, the Irving Harris Programs at the University of Minnesota, and the Clinical and Translational Science Institute (CTSI). Institute presentations and topics include: preconception and prenatal health, health care of pregnant women in state prisons, pregnancy and parenting support for women in prison, and more.

Little Children, Big Challenges: Incarceration
http://www.sesamestreet.org/parents/topicsandactivities/toolkits/incarceration

This website contains, resources, videos, a downloadable phone app, and activities aimed at helping children talk about their feelings, understand incarceration, know what to expect when visiting an incarcerated parent, and much more.
Interested in Making a Difference?
Consider a Master’s in Public Health (MPH) Degree in Maternal and Child Health

Rebecca Shlafer is currently pursuing her Master’s in Public Health (MPH) in Maternal and Child Health (MCH) from the University of Minnesota’s School of Public Health (SPH). She is an Assistant Professor at the University of Minnesota in the Department of Pediatrics, and a passionate researcher, advocate and expert on child and adolescent development in the context of parental incarceration. Shlafer received her PhD in Child Psychology from the Institute of Child Development at the University of Minnesota and a Masters in Human Development and Family Studies from the University of Wisconsin-Madison.

As a recipient of a Career Development Award from the Clinical and Translational Science Institute, Shlafer created a career development plan, which included continuing her education. “I decided to pursue a degree in public health because it brought together my background in human development and family studies, and my interest in health and health outcomes,” she explained. “I could’ve completed an online MPH program anywhere, but the reality was that this program was the perfect fit for me.” Shlafer felt that the interests of the SPH faculty, courses and ease of the online program fit well with her professional career and opportunity for growth. “I appreciate that I can take most of my courses online, but if there’s a class that I want to take in person and it fits with my schedule, I can do that,” she said. Although Shlafer had to adjust to being a student in an online classroom, the interactive courses have allowed her to have meaningful and rich conversations with other students. “Many of my classmates are coming from vastly diverse educational and professional backgrounds and we’ve all come together on this core passion for improving maternal and child health,” she said. “And it’s exciting.”

Shlafer’s passion for working with individuals and families affected by incarceration was ignited during her undergraduate education at the University of Wisconsin-Madison. As a research assistant, she had the opportunity to conduct focus groups that assessed the experiences of grandparents who were raising their grandchildren. “So many of the stories about grandparents raising their grandchildren were around issues and challenges with the middle generation. Challenges such as substance abuse, mental health issues, criminal activity, or really complex issues that were happening in that middle generation that inhibited those parents’ ability to provide the care their children needed. Generations of families were struggling,” she said. “I kept thinking, ‘What are the intergenerational consequences and challenges of this?’ What was most fascinating to me was that some of these grandparents were really thriving. What were the circumstances that helped them succeed despite really challenging circumstances?” This question has had a profound impact on Shlafer’s 15 years of work in raising awareness and advocating for mothers, children and families affected by the criminal justice system.

Of the many roles and projects that she has undertaken, Shlafer serves as a volunteer Guardian ad Litem in Hennepin County and an executive board member for Court Appointed Special Advocates of Minnesota, a non-profit organization that supports and promotes court-appointed volunteer advocates. As a Guardian ad Litem, she is appointed by a judge to advocate for the best interests of abused and neglected children in juvenile court, many of whom also have a parent involved in the corrections system. She is committed to making sure that every child has a voice in the courtroom. Additionally, in 2013, Shlafer was actively involved in Sesame Street’s Little Children, Big Challenges: Incarceration initiative to raise awareness and support for children with incarcerated parents. Through this project, Shlafer and her team distributed more than 27,000 resource kits to families affected by incarceration in Minnesota.

Interested in Making a Difference?
Consider a Master’s in Public Health (MPH) Degree in Maternal and Child Health

by Shoua Vang
Shlafer reflected that, as a developmental psychologist, she was trained in research and practice approaches that are similar to those of maternal and child public health professionals. These approaches include addressing social determinants of health, a life course perspective and how ecological systems influence health across generations. “What I wanted out of the MPH MCH program was a population lens—which is what I’ve gotten so far.” The MCH program has provided her with training that is less focused on the individual family and child perspective, but on population level issues and challenges, such as a broader perspective on systems and the way systems influence health. This is particularly important given her work with incarcerated individuals. “With this new perspective, I’ve explored the ways that corrections’ systems and policies impact children, families, and health,” she said. “And that, to me, has been where these two pieces of my life and my research have come together.”

As the research director for Isis Rising, a prison-based pregnancy, birth, and parenting program providing one-on-one doula support to incarcerated women at the prison in Shakopee, Minnesota, Shlafer looks forward to the possibility of expanding the program to other states. “I’m interested in learning about community-based models in which we can support women who have a lot needs so that they don’t re-offend and end up incarcerated again. It is important to address the factors that contribute to cycles of incarceration, poverty and systematic disparities.” She also hopes to explore how this research can have an impact on local, state and federal policies. “When I think about the MCH program in general, I’m not sure if I would’ve pursued a PhD in developmental psychology had I known at the time that MCH existed. It allows you to think about critical issues at many levels—individuals, families, communities, and systems—in a way that is really unique. In this way, MCH feels like my academic home,” she said.

Shoua Vang is an MPH student in the Maternal and Child Health Program, Division of Epidemiology & Community Health, School of Public Health, University of Minnesota.

**WHAT IS MCH? WE ARE MCH!**

Do you ever wonder how to explain the depth and breadth of MCH public health work? Our HRSA training grant colleagues at the University of South Florida/Tampa developed a series of Prezi presentations to address this issue. Each presentation begins by posing the question, “What is MCH?” It then describes MCH in terms of our work with individuals, families, and communities. The Prezi presentations end with brief “stories” that were submitted by our University of Minnesota Center for Leadership Education in MCH, and other HRSA-funded training grant colleagues across the nation, to describe our varied work. There are four Prezi presentations available at the following links. The main one is the longest version; the mini-Prezis can be quickly viewed and each has different stories from the main Prezi. Take a look—you might recognize a story from someone you know!

- “We are MCH!” Main Prezi: http://prezi.com/rz0qkn wwzvp/we-are-mch/
- “We are MCH” Mini #1: http://prezi.com/c7e6u6hpky2u/we-are-mch-mini-1/
- “We are MCH” Mini #2: http://prezi.com/wc9jvevjv3nz/we-are-mch-mini-2/
- “We are MCH” Mini #3: http://prezi.com/kyjdfgl9b17o/we-are-mch-mini-3/
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This page: Bud-Break. By Carol L. Wiebe, cwiebe162@gmail.com.
Save the Date: Conferences and Events

**JANUARY 24-27, 2015**
The Association of Maternal & Child Health Programs (AMCHP) Annual Conference
Washington, DC

**FEBRUARY 6-11, 2015**
American Correctional Association (ACA) Winter Conference
Long Beach, CA

**FEBRUARY 11, 2015**
Interdisciplinary Women's Health Lecture Series:
Minnesota Chlamydia Project
Minneapolis, MN
[http://www.womenshealth.umn.edu/events/lectures/index.htm](http://www.womenshealth.umn.edu/events/lectures/index.htm)

**MARCH 11, 2015**
Interdisciplinary Women's Health Lecture Series, Excess Weight Gain Among Young Women with a History of Childhood Abuse
Minneapolis, MN
[http://www.womenshealth.umn.edu/events/lectures/index.htm](http://www.womenshealth.umn.edu/events/lectures/index.htm)

**MARCH 29-31, 2015**
Correctional Education Association Leadership Forum
Columbia, MD
[http://www.ceanational.org/upevents.htm](http://www.ceanational.org/upevents.htm)

**MARCH 30-APRIL 3, 2015**
Art & Science of Health Promotion Conference:
What's Next for Health Promotion?
San Diego, CA
[http://www.healthpromotionconference.com](http://www.healthpromotionconference.com)

**APRIL 19-22, 2015**
American Jail Association 34th Annual Conference & Jail Exposition
Charlotte, NC
[http://www.americanjail.org/education/annual-training-conference](http://www.americanjail.org/education/annual-training-conference)

**APRIL 26-29, 2015**
National Family Planning and Reproductive Health Association (NFPRHA) National Conference
Alexandria, VA
[http://www.nationalfamilyplanning.org/NC](http://www.nationalfamilyplanning.org/NC)

**MAY 7-8, 2015**
Teenwise Minnesota Annual Conference
Brooklyn Center, MN
[http://teenwisemn.org/teenwise-events](http://teenwisemn.org/teenwise-events)

**AUGUST 11-13, 2015**
National Institute of Corrections (NIC), Women Offenders: Developing an Agency-Wide Approach
Aurora, CO
[http://nicic.gov/training/15c7302](http://nicic.gov/training/15c7302)

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