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A HOLISTIC APPROACH TO Corrections Early Release COVID-19 Strategies©

AN *URGENT* POLICY PAPER

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Background

In response to the COVID-19 pandemic and the increase in infections among workers and inmates within state prisons,[1] many states are implementing early release of prisoners to reduce the impact of COVID-19 within their correctional facilities.[2] This action will help alleviate overcrowding in prisons and reduce the risk of morbidity and mortality from COVID-19. However, upon re-entry those with opioid and other substance use disorders (OUD/SUD) face other risks that include reoccurrence of substance use, fatal and non-fatal drug overdose, and recidivism. These risks may be greater for prisoners from rural areas where there are fewer services. Thus, it is important to address unintended consequences that may be mitigated if a thorough plan of re-entry accounts for these risks and supports evidence-based treatment and recovery. To reduce the overall risk, successful reintegration will include COVID-19 precautions as well as provisions for appropriate housing, recovery services, healthcare/mental health care, and employment. This holistic approach to early release will prove beneficial to reduce prison overcrowding, COVID-19 infections, overdose deaths and recidivism.

Potential Unintended Consequences of Early Re-Entry

More than 80% of incarcerated individuals report having used an illicit substance in their lifetime, and only 20% of those with OUD/SUD received treatment in prison.[3] If an individual experiences recurrence, they are 68% more likely to be re-incarcerated within three years of release.[4] Decreased drug tolerance due to reduced drug use during incarceration makes relapse more dangerous for those with OUD/SUD, and overdose likely.[5] Two studies from the Washington State Department of Corrections (DOC) document the increased risks for individuals with OUD/SUD upon release from prison. A cohort study between 1999-2009 found that the leading cause of death among former prisoners was overdose; opioids were involved in 14.8% of all

[1] Rita Rubin, "The Challenge of Preventing COVID-19 Spread in Correctional Facilities," *JAMA*. Published online April 7, 2020. doi:10.1001/jama.2020.5427

[2] "Responses to the COVID-19 Pandemic," Prison Policy Initiative, last modified April 22, 2020, https://www.prisonpolicy.org/virus/virusresponse.html#releases

[3] Adam Chamberlain et al., "Illicit Substance Use after Release from Prison Among Formerly Incarcerated Primary Care Patients: A Cross-Sectional Study," *Addiction Science and Clinical Practice* 14, no. 1 (2019): 7.

[4] Steven Belenko et al., "Treating Substance Use Disorders in the Criminal Justice System," *Current Psychiatry Reports* 15, no. 11 (2013): 1-11.

[5] Clarissa S. Krinsky et al., "Drugs, Detention, and Death: A Study of the Mortality of Recently Released Prisoners," *The American Journal of Forensic Medicine and Pathology* 30, no. 1 (2009): 6-9.

deaths and 58.6% of overdose deaths.[6] Importantly, the time immediately following release is a critical window that is directly correlated to health outcomes and recidivism. Another Washington State DOC study from 1999-2003, found that former inmates were at 12.7 times greater risk of death in the two-week period following release than comparable Washington State residents of similar demographics (age, sex, and race).[7] A study conducted among New York Department of Corrections found that "formerly incarcerated people in New York City (NYC) were eight times more likely to die of drug-related causes during the first two weeks after release than were non-incarcerated NYC residents in the same two-week period." [8] Other contributing factors to poor outcomes included decreased access to healthcare services for individuals with SUD, mental health disorders, and other co-morbidities during the post-release transition period.[9] These studies point to the importance of establishing evidence informed policies and processes in addressing early release and re-entry during the COVID-19 pandemic.

Rural Prisoner Populations at Potentially Greater Risk

Sixty million, or 19.3% of Americans, make up rural America[10] and rurality is an important factor when assessing risks and planning for early release in this population. Rural communities are also experiencing increasing drug overdose mortality rates, rising numbers of incarcerated individuals, while facing a multifaceted, complex set of community challenges. In fact, the recent Rural Community Action Guide, published by the National Drug Control Policy stated, "In rural communities, jails have become a revolving door for individuals struggling with mental health and SUD." [11]

Studies reveal the disproportional impact in rural communities. In an analysis of pooled data from 861 jail jurisdictions from 2013-2019, the estimated number of custodial inmates increased by 27% (39,000 inmates)

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[6] Ingrid A. Binswanger et al., "Mortality After Prison Release: Opioid Overdose and Other Causes of Death, Risk Factors, and Time Trends from 1999 to 2009," *Annals of Internal Medicine* 159, no. 9 (2013): 592-600.
[7] Ingrid A. Binswanger et al., "Release from Prison — A High Risk of Death for Former Inmates," *The New England Journal of Medicine* 356, no. 2 (2007): 157-65.
[8] Sungwoo Lim et al., "Risks of Drug-Related Death, Suicide, and Homicide During the Immediate Post-Release Period Among People Released From New York City Jails, 2001–2005," *American Journal of Epidemiology* 175, no. 6 (2012): 519-26.
[9] Joseph W. Frank et al., "Emergency Department Utilization Among Recently Released Prisoners: A Retrospective Cohort Study," *BMC Emergency Medicine* 13, no. 1 (2013): 16.
[10] United States Census Bureau, *What Is Rural America?*, (2017), Retrieved from https://www.census.gov/library/stories/2017/08/rural-america.html
[11] Office of National Drug Control Policy. *Rural Community Action Guide* (Washington, DC: 2019), retrieved from https://www.usda.gov/sites/default/files/documents/rural-community-action-guide.pdf

in rural areas while decreasing by 18% (36,200 inmates) in urban areas.[12] The proportional increase in drug overdose mortality is also higher in rural counties. The most recent CDC report drawing National Vital Statistics System data indicated that from 1999-2017, while rates of drug overdose mortality increased 244% in urban counties, they increased by 400% in rural counties (6.4 and 4.0 to 22 and 20, respectively).[13]

Further, 65% of rural counties are designated by HRSA as health professional shortage areas (HPSAs)[14] in addition to a variety of contextual factors unique to rural areas that synergistically contribute to healthcare access and outcomes disparities.[15] Rural areas are disproportionately affected by lack of access to auxiliary services such as detoxification and mental health care, coupled with greater geographic distance between service providers and are connected with poorer rates of recovery and well-being.[16] Extremely diverse, rural populations are known for having a strong sense of independence, pride in their community, and self-reliance.[17] Although positive qualities, these potentially inhibit rural populations from seeking care.[18] The lack of anonymity in rural areas may also serve as an additional barrier, especially when seeking care for behavioral health.[19] These factors, along with the known risk factors associated with early release, put incarcerated populations in rural areas at even greater risk during re-entry.

Potential Solutions to Address This Urgent Issue

For successful reintegration, the re-entry process will include a risk assessment of both COVID-19 and the sequelae associated with OUD/SUD during re-entry based on available evidence. In some circumstances, the risk associated with SUD upon release and re-entry may be higher than the risk

[12] Jacob Kang-Brown et al., *People in Jail in 2019*, (New York: Vera Institute of Justice, 2019), https://www.vera.org/downloads/publications/people-in-jail-in-2019.pdf
[13] Holly Hedegaard et al., *Urban–Rural Differences in Drug Overdose Death Rates, by Sex, Age, and Type of Drugs Involved 2017*, (2019) retrieved from https://www.cdc.gov/nchs/data/databriefs/db345-h.pdf
[14] J. Probst, et al., "Person and Place: The Compounding Effects of Race/Ethnicity and Rurality on Health," *American Journal of Public Health* 94, no. 10 (2004):1695-1703.
[15] David Hartley, "Rural health disparities, population health, and rural culture," *American Journal of Public Health* 94, no. 10 (2004):1675–1678., Mark S. Eberhardt, et al., "The importance of place of residence: examining health in rural and non-rural areas," *American Journal of Public Health* 94, no. 10 (2004):1682–1686.
[16] Erin Pullen and Carrie Oser, "Barriers to substance abuse treatment in rural and urban communities: counselor perspectives," *Substance use & misuse* 49, no. 7 (2014): 891-901. doi:10.3109/10826084.2014.891615
[17] Richard Crosby, *Rural Populations and Health*, (San Francisco, CA: Jossey-Bass, 2012), 4.
[18] Eberhardt et al., "The importance of place of residence: examining health in rural and non-rural areas," 1682–1686.
[19] J. Gale et al., *Behavioral health in rural America: Challenges and Opportunities*, (Rural Policy Research Institute (RUPRI), 2019), retrieved from http://www.rupri.org/wp-content/uploads/Behavioral-Health-in-Rural-America-Challenges-and-Opportunities.pdf

associated with COVID-19 if actions are not taken to also address OUD/SUD. **Well-planned, evidence-based policy will include procedures to address the risks of both.** Evaluation of eight years of outcomes from Recovery Kentucky programs document the positive impact for individuals with OUD/SUD with DOC involvement who participate in this social recovery housing program.[20] Other research has detailed the association between post-release employment, supportive housing, and access to health care/health insurance with lower re-arrest rates and drug use among prisoners re-entering society and indicate that protocols and guidance materials that incorporate those factors will likely reduce the risk of illicit drug use, overdose, and recidivism upon early release.[21] There is an evident need for public policies to incorporate employment, drug treatment, housing, and healthcare—some of the key elements not often accessible to populations re-entering society.[22] This is particularly important for persons from and returning to rural communities.

Therefore, our policy recommendation serves as guidance for communities to organize and mobilize the resources required for this vulnerable population to ensure safe and successful re-entry into society, taking the current risks associated with COVID-19 into consideration. In our guidance, we propose a plan of action with the inclusion of healthcare access and resources, recovery housing, and employment as vital elements that may potentially translate to lower rates of recidivism, recurrence of alcohol/drug use, fatal and nonfatal overdose, and an overall healthy transition into society.

Diagnostic Testing for COVID-19

The primary testing for COVID-19 is the Real-Time RT-PCR (Reverse Transcriptase Polymerase Chain Reaction) test that aids the detection and diagnosis of COVID-19 genetic material.[23] The other tests being developed are serology tests that look for the presence of antibodies, which are specific proteins made in response to infections. Antibodies can be found in the blood and in other tissues of those who are tested after infection. The antibodies detected by this test indicate that a person had an immune response to SARS-CoV-2, whether symptoms developed from infection or the infection

[20] T. Logan, J. Cole, J. Miller, & A. Scrivner, *Findings from the Recovery Center Outcome Study 2019 Report*. (Lexington, Kentucky: University of Kentucky Center on Drug and Alcohol Research, 2019), retrieved rom https://cdar.uky.edu/RCOS/RCOS_2019_Report.pdf

[21] Nicholas Freudenberg et al., "Coming Home From Jail: The Social and Health Consequences of Community Re-entry for Women, Male Adolescents, and Their Families and Communities," *American Journal of Public Health* 98 (2008): S191-202.

[22] Ibid.

[23] "Coronavirus Disease 2019 (COVID-19)," Centers for Disease Control and Prevention (CDC), retrieved from https://www.cdc.gov/coronavirus/2019-ncov/lab/testing-laboratories.

was asymptomatic. The RT-PCR is considered the standard for diagnosis of infection for COVID-19. The serology tests test the individual's response to a previous infection and may not be positive for up to 12 days after onset of symptoms and thus have little utility for acute diagnosis. This test, however, is becoming more available and will likely be useful to determine the level of immunity of asymptomatic individuals.[24] This information will be useful for evaluating new clients. Individuals with positive serology for COVID-19 may be much less likely to present a risk of re-infection and thus transmission to other members of the community. The utility of the test is evolving as more studies are conducted.

POLICY FOR TRANSITION OF PRISONERS WITH SUBSTANCE USE DISORDER FOR TREATMENT AND RECOVERY DURING RELEASE

Purpose: Suggested protocol for the release of prisoners who have substance use disorder/opioid use disorder (OUD/SUD), to reduce the risk of not only COVID-19 infection but also the relapse of OUD/SUD, fatal and non-fatal overdoses, whether from parole, probation, early release or pre-adjudication diversion.

COVID-19 and Overall Risk: Several factors must be considered to assess risk. COVID-19 in aggregate living, such as recovery housing, may present a greater risk of infection than releasing to single-dwelling housing. However, without supportive service this population is at a much higher risk of overdose and recidivism. Additionally, recovery/supportive housing with sound COVID-19 policies may mitigate the risk of infection while providing the recovery services needed to reduce the OUD/SUD associated risks. With an evidenced-based protocol, both risks may be mitigated.

Factors included in risks assessment:

1. The prisoner's level of OUD/SUD risks based on past behavior.
2. The presence of historical or current mental health concerns, particularly if co-occurring with SUD.
3. The historical individual's drug of choice and the availability of that drug in the re-entry environment.
4. The availability of outpatient treatment, MOUD, where OUD is the primary diagnosis. This may be a challenge in rural communities, requiring an evaluation of alternatives in the rural community.

[24] J. Abbasi, "The Promise and Peril of Antibody Testing for COVID-19," *JAMA*, retrieved from https://jamanetwork.com/journals/jama/fullarticle/2764954

5. The availability of supportive living arrangements or the need for recovery housing.
6. The availability of recovery housing with COVID-19 policies consistent with CDC recommendations for aggregate living.
7. The availability of recovery housing that has proven outcomes or utilizes best practices.
8. The availability of transportation.
9. Access to online recovery support services.
10. The ability of the released individual to find and keep employment to provide for living expenses (or access to financial support during quarantines and limited employment opportunities).
11. Meaningful employment, supportive healthy relationships with friends and family, transportation, and the opportunity for needed training and career advancement toward more meaningful employment and the individual's sense of meaning and purpose in the re-entry environment.

Suggested Protocol for Release:

1. Complete a pre-release assessment including the above factors:
    a. Determination of the desires of the person being released, including motivation and skills
    b. The risk level of the person to the community
    c. The availability of supportive housing, employment, transportation, and recovery support services (treatment, peer support, clinical support)
        i. If within a rural area with minimal access to healthcare services, assess availability of Tele-Health access for persons being released based on needs (mental/behavioral health specialists, etc.)
    d. Appropriateness for available recovery support programs, including recovery housing

2. Release plan shall include:
    a. Definitive living arrangements
    b. Plans for follow-up for treatment appropriate for the primary substance and severity of SUD from client's history
    c. Arrangements for the transition to recovery housing when indicated
    d. Arrange for release date and transportation
        i. Arrange for referrals to re-entry service providers to assist with various needs (obtaining housing, employment,

education and job training, and the legal services that are essential to reintegration) including through warm hand-offs
    ii. Establishing eligibility and application for public programs such as Medicaid, SNAP, and Section 8 housing
    iii. Arrange for treatment with medication for OUD and Naloxone training and supply. A pre-release activity might include an initial Tele-Health consultation for individuals in rural communities in which access to MOUD is limited or unavailable
  e. Plan for providing access to key public benefits prior to release, for example, through the completion of applications prior to release or the securing of benefits
    i. Such plans should include resolution of barriers relating to meeting eligibility requirements for benefits that may arise due to the pandemic, for example, because of the closure of governmental offices that issue photo identification where photo identification is a prerequisite to establishing benefits eligibility. It should address related issues like the mailing of benefits cards or documentation for individuals whose address is not established at the time of application.

3. COVID-19 Precautions
  a. Ensure client has no symptoms or temperature of 100.4 F or above
  b. If RT-PCR testing is available (preferred)
    i. If client has had symptoms or is recovering, then two negative tests 24 hours apart are required to ensure the client is not infectious
    ii. If client is asymptomatic then one test should be performed before release
    iii. Quarantine or avoidance of exposure procedures before and during transportation to chosen housing
    iv. The use of serology testing is not recommended at this time as a basis for clinical decisions but as more research develops this testing may play a role
  c. If testing is not available
    i. Quarantine asymptomatic clients for 14 days before release
    ii. Symptomatic clients should be held until 72 hours after symptoms have cleared, including being afebrile without anti-fever medications and no sooner than seven days after the onset of symptoms

d. Individuals should wear a mask during transfer and in public places where six feet separation is not feasible
e. Transportation
    i. This may be performed by either corrections, probation or parole officers, family, or recovery housing staff
    ii. COVID-19 precautions consistent with CDC recommendations[25] should be taken during the transfer and transportation until with family or in a recovery facility
    iii. Drivers should be screened daily for possible exposure, fever, and other symptoms. If screening is positive, then drivers should be tested or quarantined and not allowed to transport clients.
    iv. Vehicles used for transportation should be sanitized before each transfer
    v. Liability of transportation should be addressed by acceptance of Corrections or by the signed transfer of responsibility at the time of transportation. Transportation liability risks should also be accessed by state and local legal counsel that consider state and local regulations
    vi. Any subsequent development of symptoms or of COVID-19 infection of drivers or passengers should be reported to Corrections and to the family and/or recovery facility

4. Naloxone Training and Supply
    a. All clients released with a history of SUD should be trained on the use of and given Naloxone (Narcan) at the time of release. This training should be made available to family members and friends, if appropriate, as part of the supportive services planning. Receiving recovery housing operations should have received training and have Narcan available onsite.
5. Medication for Opioid Use Disorder (MOUD)
    a. For individuals with a history of Opioid Use Disorder and MOUD treatment while in prison, there should be a plan for continuity of care
6. Follow up
    a. Follow up with the client by Corrections officials should be performed in accordance with the release terms for parole or probation
    b. Recovery housing staff should regularly report the status of the client in accordance with the transferring agency agreement for services

[25] "Coronavirus (COVID-19)," Centers for Disease Control and Prevention (CDC), retrieved from https://www.cdc.gov/coronavirus/2019-ncov/index.html

c. For those released to other living arrangements follow-up is suggested weekly for at least one month to assess the availability of supportive services and status of the client

7. Outcome Assessment
    a. As part of continuous quality improvement, clients should be given the opportunity to participate in outcome evaluations. Some may be required as part of the release terms.
    b. Outcomes should include evaluation of:
        i. Overdose, either fatal or non-fatal (this may be done via collaboration with ED and coroner/medical examiner)
        ii. Return to use data from self-reporting or providers if given permission by the client in the outcome protocol
        iii. Exposure or infection with COVID-19
        iv. Employment status
        v. Living arrangements
            1. Individual
            2. Family
            3. Friends
            4. Recovery Housing
        vi. Supportive services available
            1. Transportation
            2. Medical and SUD treatment/telemedicine
            3. Peer Support
            4. Access to social services
8. Release status report
    a. A report should be prepared regarding the outcome and status of those released to include:
        i. Re-arrest
        ii. SUD fatal and non-fatal overdose rate
        iii. SUD reoccurrence
        iv. Housing arrangements
        v. Employment
        vi. Training/Educational activities
        vii. Completion of recovery housing programs
        viii. Participation in ongoing treatment
        ix. Participation in peer support services
        x. Evaluation of factors with a potential relationship to outcomes; gender, age, race/ethnicity, geographic residence

Summary

Prisoner release is becoming more frequent, advisable, and challenging given the complications of COVID-19 and the high rate of OUD/SUD of persons who are incarcerated. The risks posed by these challenges can be mitigated by well-informed protocols and adherence to CDC guidelines as well as appropriate evaluation and risk assessment of each client before release. This effort will require more work and diligence by all involved, but in the long run, well-planned re-entry will reduce recidivism and the risk of overdose. Other promising outcomes include improved public safety and reduced cost of corrections and prison overcrowding as a result of reduced recidivism.

Bibliography

Abbasi, Jennifer. "The Promise and Peril of Antibody Testing for COVID-19." *JAMA*, Published online April 17, 2020. Doi: 10.1001/jama.2020.6170

Belenko, Steven, Matthew Hiller, and Leah Hamilton. "Treating Substance Use Disorders in the Criminal Justice System." *Current Psychiatry Reports* 15, no. 11 (2013): 1-11.

Binswanger, Ingrid A., Patrick J. Blatchford, Shane R. Mueller, and Marc F. Stern. "Mortality after Prison Release: Opioid Overdose and Other Causes of Death, Risk Factors, and Time Trends from 1999 to 2009." *Annals of Internal Medicine* 159, no. 9 (2013): 592-600.

Binswanger, Ingrid A., Marc F. Stern, Richard A. Deyo, Patrick J. Heagerty, Allen Cheadle, Joann G. Elmore, and Thomas D. Koepsell. "Release from Prison—A High Risk of Death for Former Inmates." *The New England Journal of Medicine* 356, no. 2 (2007): 157-65.

Crosby, Richard A., Monica L. Wendel, Robin C. Vanderpool, and Baretta R. Casey. *Rural Populations and Health*. San Francisco, California: Jossey-Bass, 2012.

Centers for Disease Control and Prevention (CDC). "Coronavirus (COVID-19)". Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/index.html

Centers for Disease Control and Prevention (CDC). "Coronavirus Disease 2019 (COVID-19)". Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/lab/testing-laboratories.html

Chamberlain, Adam, Nyamu, Sylviah, Aminawung, Jenerius, Wang, Emily A., Shavit, Shira, and Fox, Aaron D. "Illicit Substance Use after Release from Prison among Formerly Incarcerated Primary Care Patients: A Cross-sectional Study." *Addiction Science & Clinical Practice* 14, no. 1 (2019): 7.

Eberhardt, Mark S and Elsie R. Pamuk. "The importance of place of residence: examining health in rural and non-rural areas." *American Journal of Public Health* 94, no. 10 (2004):1682–1686.

Frank, Joseph W., Andrews, Christina M., Green, Traci C., Samuels, Aaron M., Trinh, Tony T., and Friedman, Peter D. "Emergency department utilization among recently released prisoners: A retrospective cohort study." *BMC Emergency Medicine* 13, no. 1 (2013):16.

Freudenberg, Nicholas, Jessie Daniels, Martha Crum, Tiffany Perkins, and Beth E Richie. "Coming Home from Jail: The Social and Health Consequences of Community Reentry for Women, Male Adolescents, and Their Families and Communities." *American Journal of Public Health* 98, no. 9 Suppl (2008): S191-202.

Gale, J. et al., "*Behavioral health in rural America: Challenges and Opportunities*," Rural Policy Research Institute (RUPRI), Last modified December 2019. http://www.rupri.org/wp-content/uploads/Behavioral-Health-in-Rural-America-Challenges-and-Opportunities.pdf

Hartley, David. "Rural health disparities, population health, and rural culture," *The American Journal of Public Health* 94, no. 10 (2004):1675–1678.

Hedegaard, Holly, Minino, Arialdi M., and Warner, M. "Urban–rural Differences in Drug Overdose Death Rates, by Sex, Age, and Type of Drugs Involved 2017." *NCHS Data Brief* 345 (2019) https://www.cdc.gov/nchs/data/databriefs/db345-h.pdf

Kang-Brown, Jacob; Hinds, Oliver; Schattner-Elmaleh, Eital, and Wallace-Lee, James. *People in Jail in 2019*, New York: Vera Institute of Justice, 2019. https://www.vera.org/downloads/publications/people-in-jail-in-2019.pdf

Krinsky, Clarissa S., Sarah L. Lathrop, Pamela B. Brown, and Kurt Nolte. "Drugs, Detention, and Death: A Study of the Mortality of Recently Released Prisoners." *The American Journal of Forensic Medicine and Pathology* 30, no. 1 (2009): 6-9.

Lim, Sungwoo, Amber Levanon Seligson, Farah M. Parvez, Charles W. Luther, Maushumi P. Mavinkurve, Ingrid A. Binswanger, and Bonnie D. Kerker. "Risks of Drug-Related Death, Suicide, and Homicide During

the Immediate Post-Release Period Among People Released From New York City Jails, 2001–2005." *American Journal of Epidemiology* 175, no. 6 (2012): 519-26.

Logan, T., Cole, J. Miller, and Scrivner, A. et al., *Findings from the Recovery Center Outcome Study 2019 Report*. Lexington, KY: University of Kentucky, Center on Drug and Alcohol Research, 2019. https://cdar.uky.edu/RCOS/RCOS_2019_Report.pdf

Office of National Drug Control Policy. *Rural Community Action Guide* (Washington, DC: 2019) https://www.usda.gov/sites/default/files/documents/rural-community-action-guide.pdf

Prison Policy Initiative. "Responses to the COVID-19 pandemic." Last modified April 22, 2020. https://www.prisonpolicy.org/virus/virusresponse.html#releases

Probst, Janice C., Moore, Charity G., Glover, Saundra H., and Samuels, Michael E. "Person and Place: The Compounding Effects of Race/Ethnicity and Rurality on Health." *American Journal of Public Health* 94, no. 10 (2004):1695-1703.

Pullen, Erin and Carrie Oser. "Barriers to Substance Abuse Treatment in Rural and Urban Communities: Counselor Perspectives." *Substance Use & Misuse* 49, no. 7 (2014): 891-901.

Rubin, Rita. "The Challenge of Preventing COVID-19 Spread in Correctional Facilities." *JAMA*, published online April 7, 2020. doi:10.1001/jama.2020.5427

United States Census Bureau. "What is Rural America?" (2017). https://www.census.gov/library/stories/2017/08/rural-america.html