



**„XXXVII. Victimology, Victim Assistance, and Criminal Justice“**  
**May 2023**      **IUC Dubrovnik**

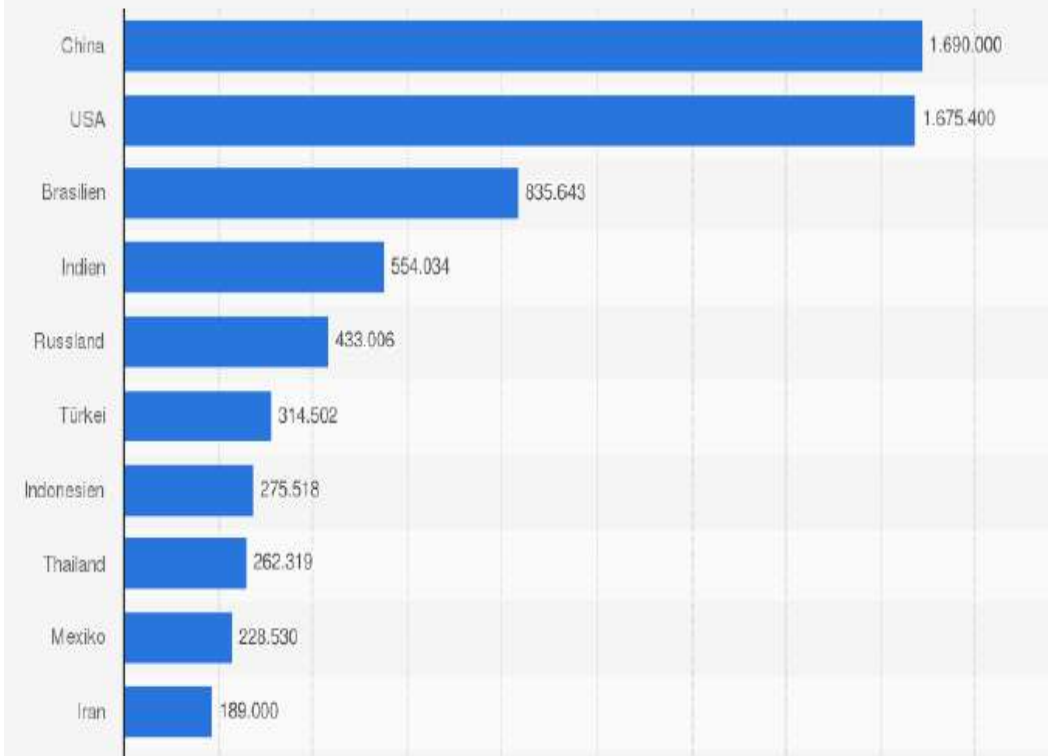
# **Health Care for Incarcerated Persons**

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Länder mit der größten Anzahl an Inhaftierten im Jahr 2023

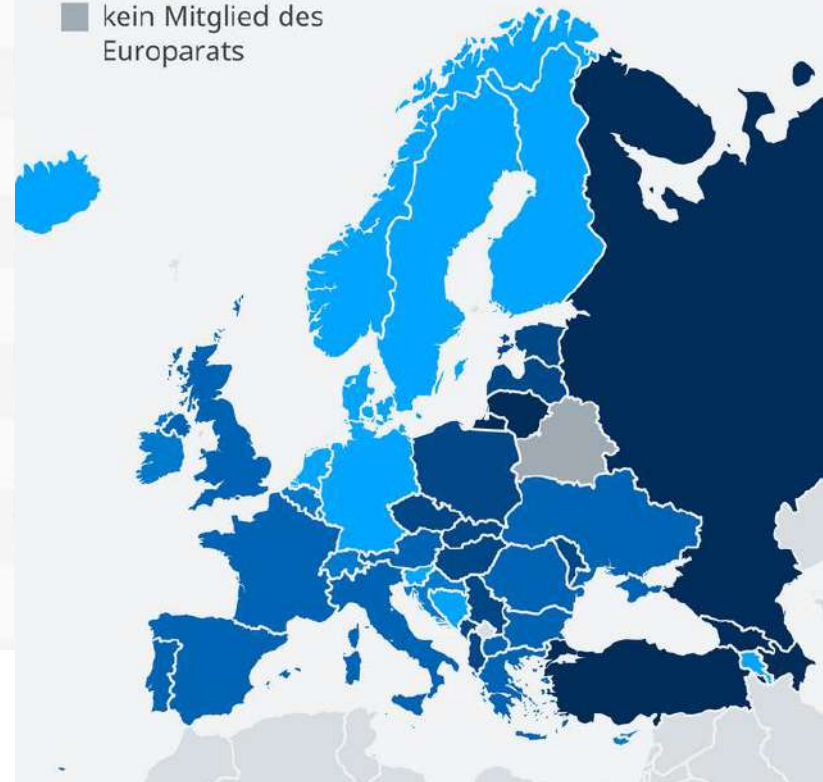


Gefängnispopulation in Europa 2020

Häftlinge pro 100.000 Einwohner

■ <80 
 ■ 80-100 
 ■ 100-150 
 ■ 150-250 
 ■ >250

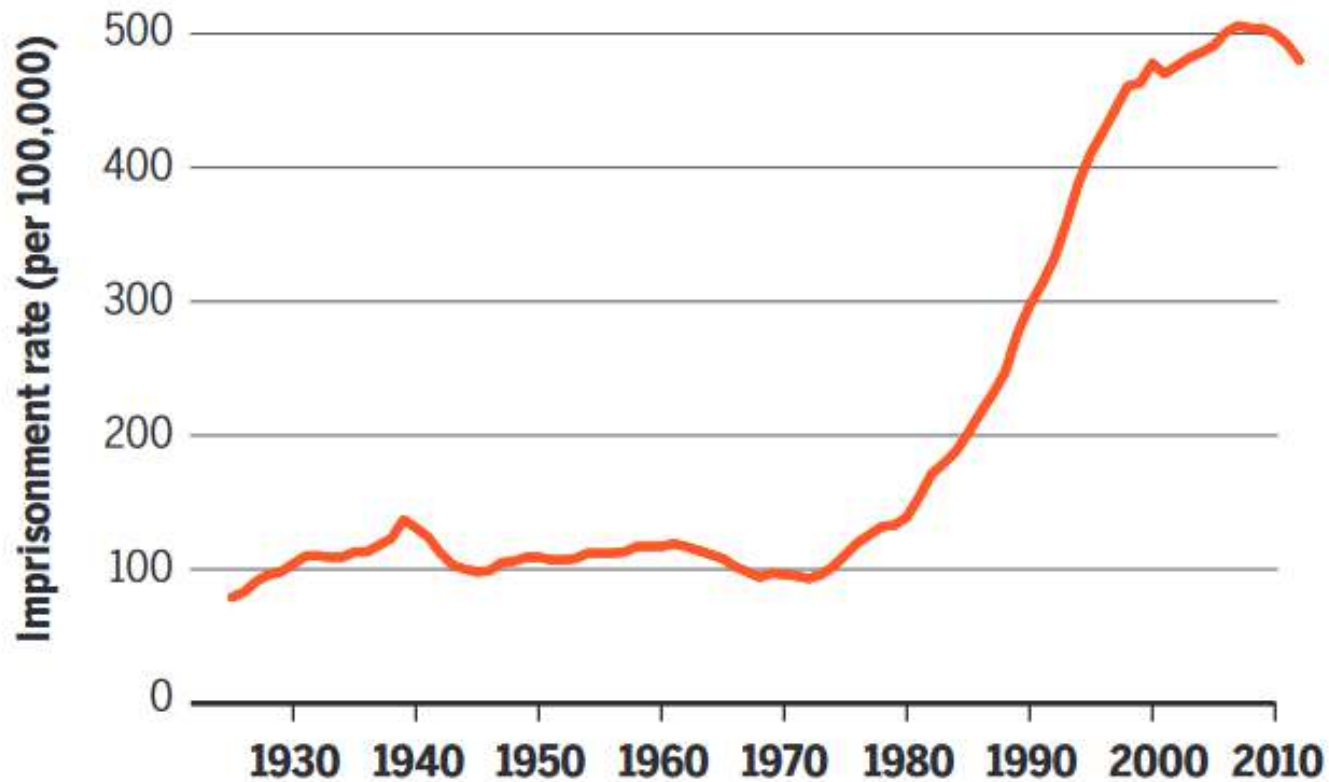
■ kein Mitglied des  
Europarats



Statista, 2023

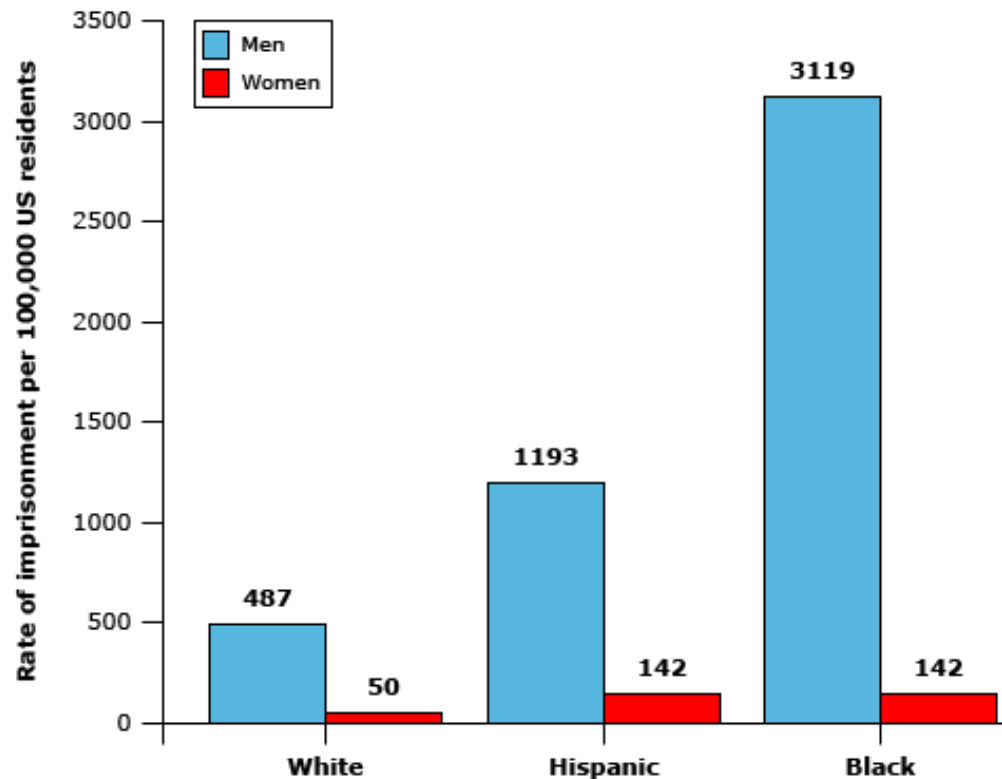
Source: Europarat SPACE I,  
31.01.2020

# Exclusion and exploitation: The incarceration of Black Americans from slavery to the present



**Fig. 1. United States imprisonment rate, 1925 to 2012.**

## Prevalence of imprisonment in the US by race and gender



Rate of imprisonment in the US by race and gender per 100,000 US residents.

Data from: Guerino P, Harrison PM, Sabol WJ. Prisoners in 2010 (Revised). US Department of Justice 2011. Available at <http://www.bjs.gov/index.cfm?ty=pbdetail&iid=2230>.

„ With more than 1,5 million Americans already in prison and nearly 13 million more confined to jails each year, these facilities essentially constitute large health care settings for historically underserved patient populations.“

NEJM Vol. 374 No. 18 p. 1705, May 5, 2016

„When I became a judge...I had no idea I would become the gate-keeper to the largest psychiatric facility in the State of Florida... . Of the roughly 100,000 bookings into the (county) jail every year, nearly 20,000 involve people with serious mental illnesses requiring intensive psychiatric treatment while incarcerated... .“ (Judge Leifman)

NEJM Vol. 374 No. 18 p. 1702, May 5, 2016

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50% have mental illness. (USA)

## Prisoners have the right ...

- To access to care,
- To care that has been ordered by a health professional,
- To a professional medical judgment.

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**Medical costs: ~ \$ 8.1 billion in the US in 2015**

**US: \$ 2,000 (Louisiana)- \$ 25,000 (California)/Year**

**Sri Lanka: \$34/Year**

## Infections

- as a consequence of the lack of space for isolating potentially contagious sick inmates.

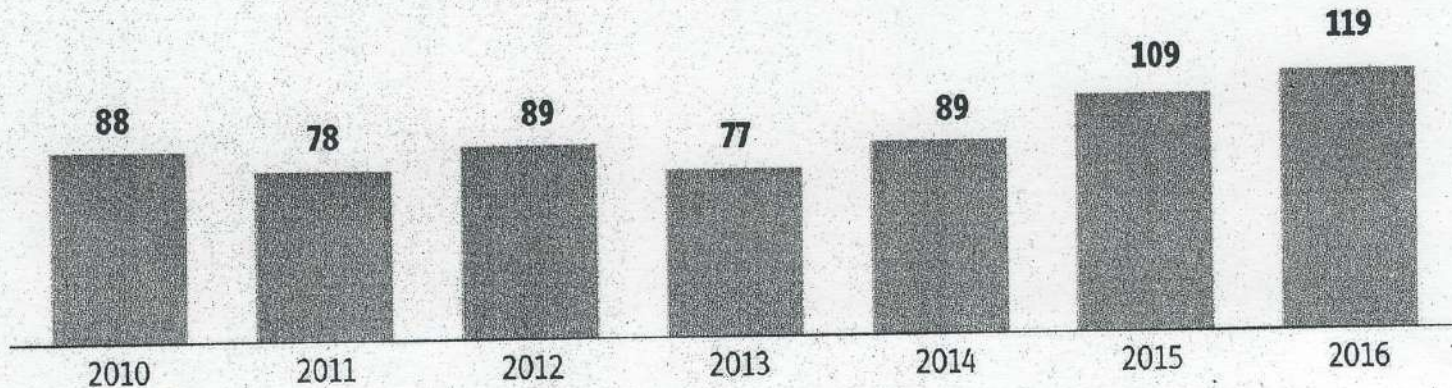
## Lack of medical care

- Injuries.
- Conditions that require immediate medical treatment, e.g. transmissible diseases.
- Continuity (uninterrupted) care of chronic conditions/diseases.
- Optical or dental needs.
- Pregnancy.
- Release.

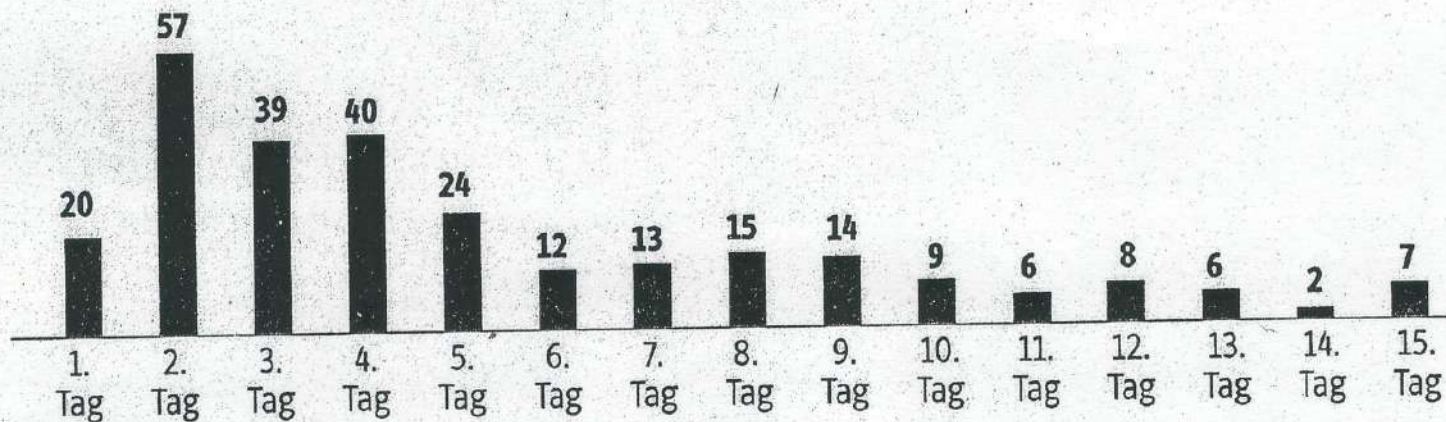


# Number of Suicides in German Prison 2010 – 2016 and Day of Event

**Anzahl der Suizide in Haftanstalten pro 100 000 Gefangene**



**Zeitliche Verteilung in den ersten 15 Hafttagen** in absoluten Zahlen seit dem Jahr 2000

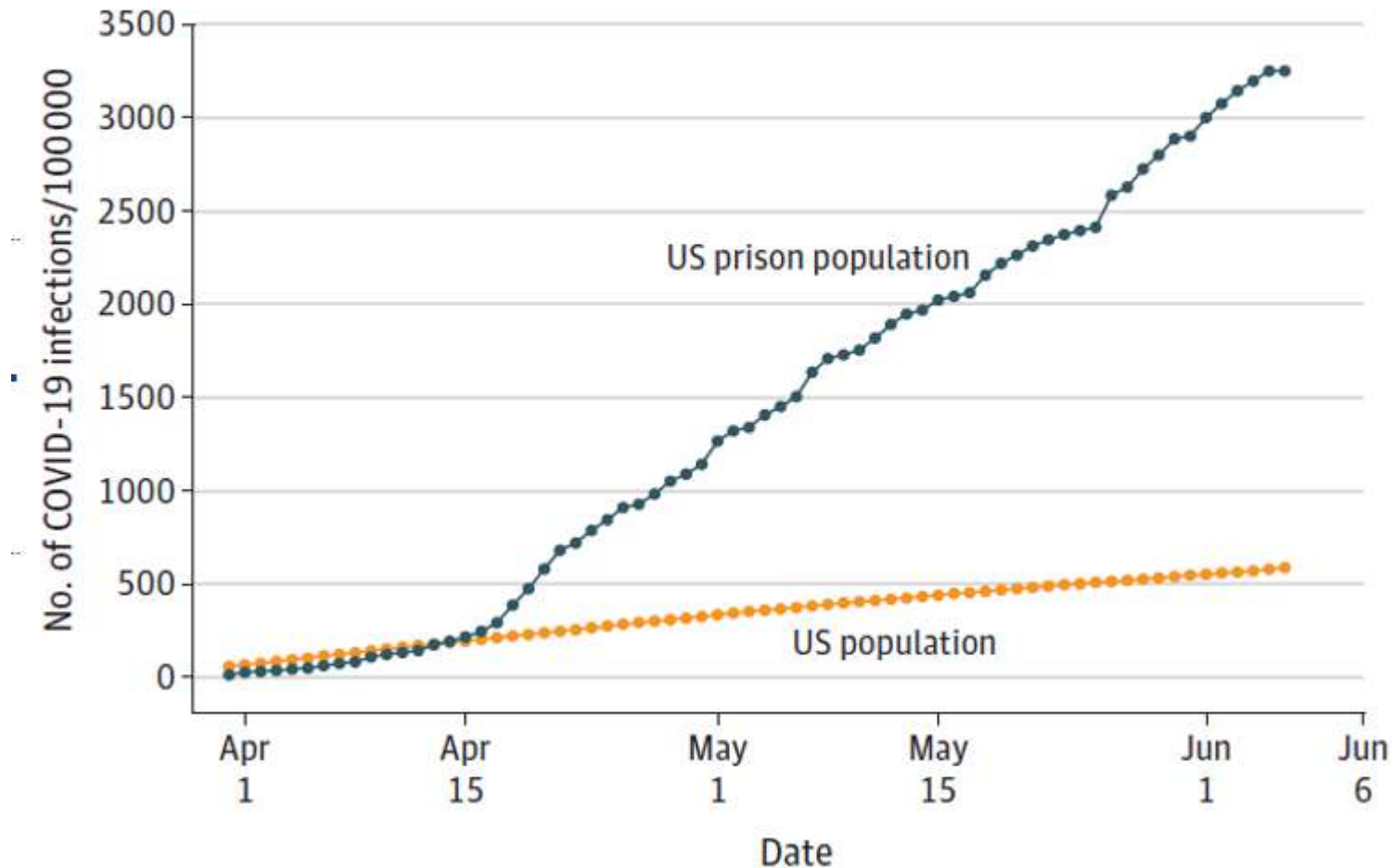


# Lack of Initial Screening for Acute/Chronic Medical and Psychiatric Problems

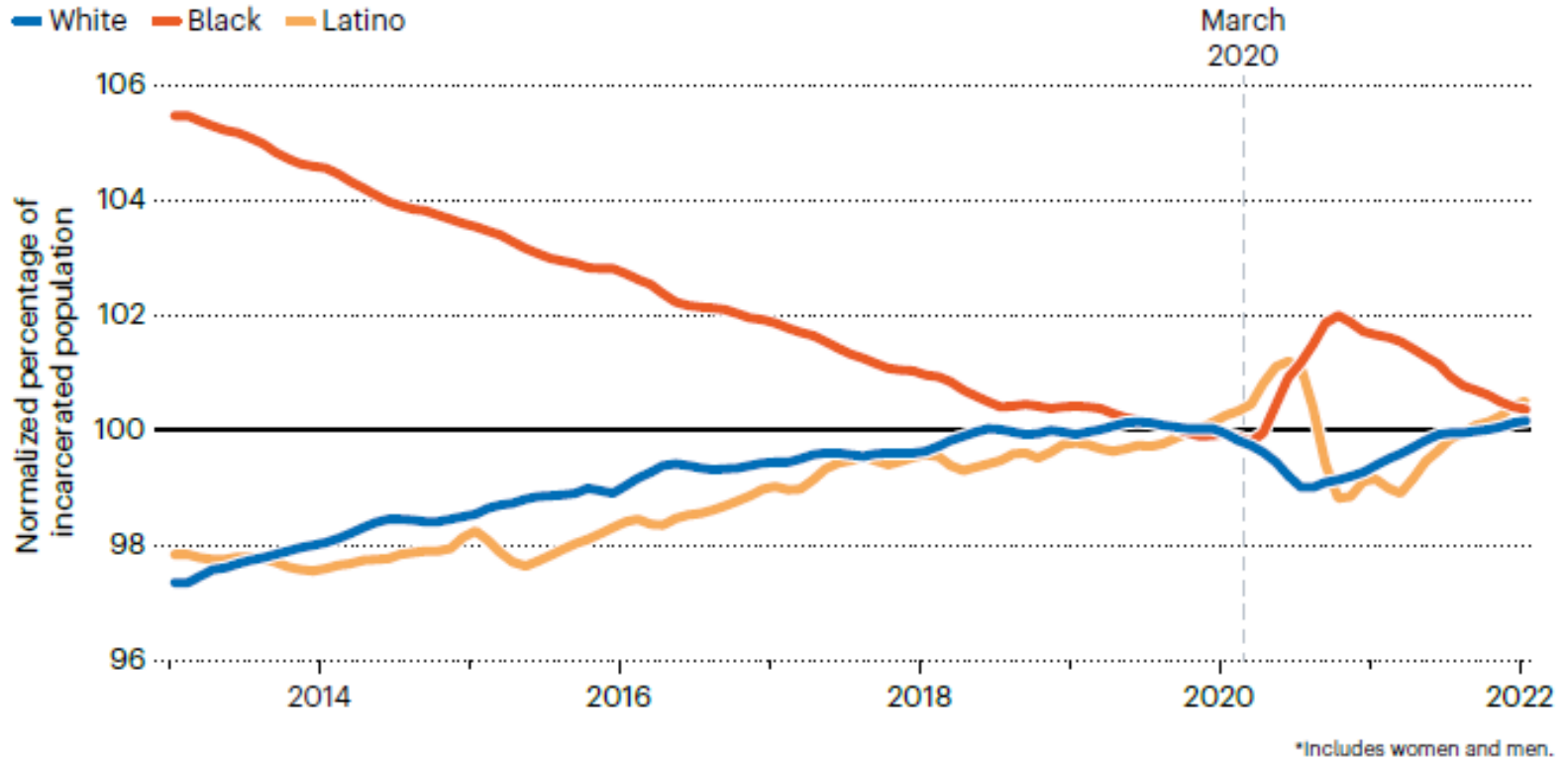
- Substance abuse - Drug and alcohol withdrawal.
- Continuity of care for chronic conditions:  
*HIV, TB, asthma, seizure disorders, coronary artery disease, diabetes mellitus, deep venous thrombosis, arrhythmias, rheumatologic conditions, etc.*
- Sexually transmitted diseases at admission:  
*Chlamydia, gonorrhea, syphilis, Trichomonas vaginalis* (in Oregon, 43 % of respondents had a history of trading sex for money).
- Tuberculosis.
- Testing for
  - HIV,      - Hepatitis A/B/C,      - Covid-19,      -Pregnancy.

Suicide prevention: History of trauma → suicide (5th leading cause of death in prison).

Figure. Trends in Cumulative Coronavirus Disease 2019 (COVID-19) Confirmed Case Rate per 100 000 People for Prison and US Populations



**Corona Death Rate: ~39/100.000 Prisoners  
Compared to ~29/100.000 Population**



Start of Pandemic:

Drop ~17%

Admission ↓ 30%

Released ca. 200.000

Nov 2020:

Black climbed back again

Reason: serving sentences

- are 20% higher than in white people

„During ordinary times in the US, approximately 80,000 people are held in solitary confinement, and more than 10% of them have spent 3 years or more under this conditions.

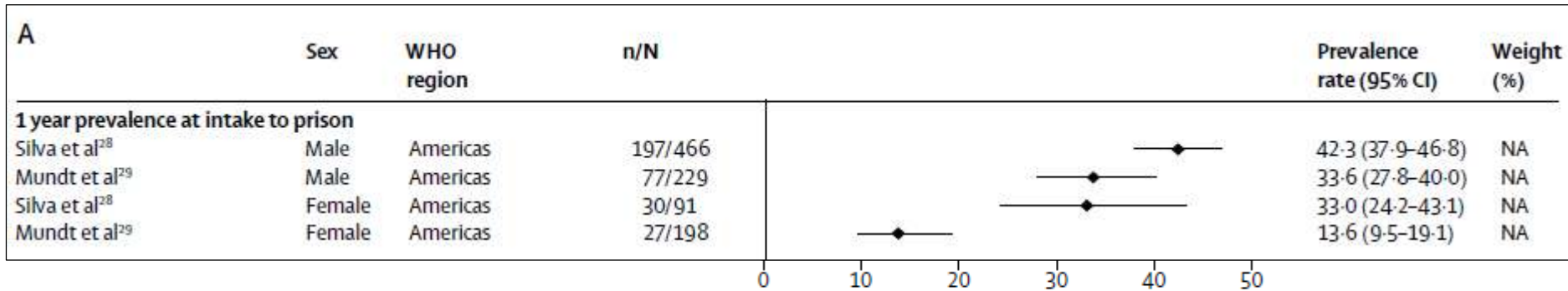
...During the Covid-19 pandemic, jail and prison administrators have dramatically increased the number of people held in solitary, which had risen to approximately 300,000 by the summer of 2020. As Covid-19 outbreaks continue, solitary is still being widely used as a “protective.” measure. “

Source: NEJM Vol. 388 No. 6 p. 559, February 9, 2023

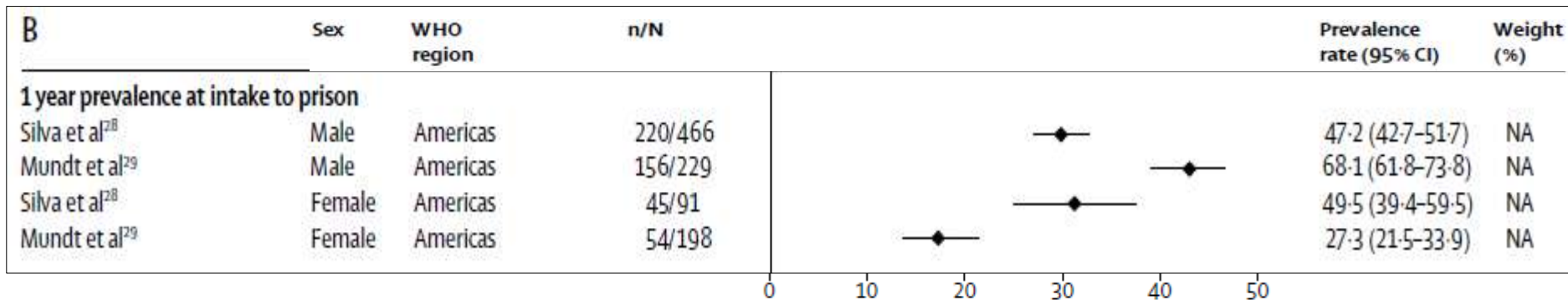


# Substance use disorders in prison populations in low-income and middle-income countries: a random-effects meta-analysis of prevalence studies

## Alcohol use disorder:



## Drug use disorder:



- Asthma.
- Diabetes mellitus.
- Seizure disorders.
- Hepatitis A/B/C: vaccination should be provided to inmate populations!
- MRSA (Methicillin-resistant Staphylococcus aureus).
- Tobacco use.
- Substance abuse.
- History of Trauma (particularly in woman).
- Mental illness (prevalence 15-24 % of US inmates):
  - Particularly schizophrenia and bipolar disorder are far more prevalent among incarcerated individuals than the general population.
  - Inmates with bipolar disorder are 3.3 times more likely to have had four or more previous incarcerations, compared with inmates with no major psychiatric disorder.
  - Co-occurring severe mental disorders, substance abuse, and antisocial personal disorders.
  - Mood disorders and personality disorders are also prevalent.

## Prevalence of infectious diseases, Texas Department Department of Criminal Justice, 1999-2000

Disease	Prevalence of disease per 100,000
Latent tuberculosis infection	16,511-24,600*
Hepatitis C	8377
HIV/AIDS	1458
Syphilis	655
MRSA	328
Herpes zoster	206
Hepatitis B	84
Active tuberculosis	39
Pneumonia	27
Gonorrhea	15
Encephalitis	3.6

\* Estimate of latent tuberculosis infection from six different correctional institutions in US, 1990-1991.

Data from: Baillargeon, J, Black, SA, Leach, CT, et al. The infectious disease profile of Texas prison inmates. *Prev Med* 2004; 38:607 and Centers for Disease Control and Prevention. Tuberculosis prevention in drug-treatment centers and correctional facilities--selected US sites, 1990-1991. *MMWR Morb Mortal Wkly Rep* 1993; 42:210.



## Prevalence of 15 most prevalent diseases, Texas Department of Criminal Justice, 1997-1998

Disease	Percentage of inmates
Tuberculosis infection (history of or current positive tuberculin skin test)	20.1
Hypertension	9.8
Asthma	5.2-8.5*
Low back pain	5.1
Viral hepatitis	5.0
Affective disorders	3.9
Arthritis	3.5
Fractures	2.9
Cirrhosis	2.8
Diabetes mellitus	2.6-4.8*
Hernia	2.0
Schizophrenic disorders	2.0
Epilepsy	1.9
Heart disease	1.7
HIV/AIDS	1.6

\* Prevalence based on data from the National Commission on Correctional Health Care, 2002.

Data from: Baillargeon, J, Black, SA, Pulvino, J, Dunn, K. The disease profile of Texas prison inmates. *Ann Epidemiol* 2000; 10:74.

- Sexual violence during incarceration is common.
- 21 % of inmates had experienced forced or pressured sexual contact during incarceration (survey of male inmates in seven midwestern prisons in 2000, limited by a low return rate of 25 %).
- Reported rates of sexual violence for women range from 8 to 27 %.

(Source: uptodate, 2017)

- **Cancer prevention/treatment (Smoking!)**
- **Most prevalent cancers:**
  - Lung
  - Non-Hodgkin Lymphoma (NHL)
  - Cancers of the Oral Cavity and Pharynx.
- **Cancer was the 2<sup>nd</sup> leading cause of death among deaths occurring in prison from 2001 to 2004. Lung cancer as the leading cause among cancer deaths in prison and after release from prison.**

- **Female prisoners have a greater likelihood to obesity compared to the general population.**
- **Salt intake is more than twice recommended levels.**
- **Nutrition.**

- A hunger strike, in which a patient who has the capacity to understand the potential medical impact of food refusal and who is not suicidal refuses food for a specific reason, is a complex practical and ethical concern that complicates the medical management of inmates.
- The medical management of patients on hunger strike should include psychiatric consultation, a medical history and evaluation, assessment of motives for food refusal and the possibility of coercion, and the prisoner's understanding of the risks and benefits of the food refusal.
- Forced feeding is unethical.

- **The number of incarcerated women in the US has increased dramatically from 78,500 women in 1990 to 215,000 women in 2014.**
- **Ca  $\frac{3}{4}$  report symptoms of a psychiatric illness.**
- **Data on pregnancy and incarceration are limited because of variable reporting requirements and inconsistent pregnancy testing on admission.**
- **The Bureau of Justice Statistics estimates that**
  - **6 -12% of women entering jail to await their trial or sentencing are pregnant,**
  - **4 % of women are pregnant at the time of commitment to prison, which would result in ~12,000 pregnant incarcerated women at any given time, with thousands more passing through the system every year.**
- **Special needs for pregnant women in jail or prison: levels of work activity, housing issues (lower bunk bed), nutritional needs, vitamin supplementation, drug and alcohol treatment, smoking cessation, screening for infections, and mental health issues.**
- **Access to abortion.**

## Prenatal Care

- Is there a medical contact person at the facility?
- What services are available on-site and when? Nutrition, Vitamins.
- How quickly can an inmate be transferred to a hospital, if required?
- If the woman is released prior to delivery, is there a plan for ongoing prenatal care and delivery?
- Genetic counseling and testing.
- Screening ultrasound examination.
- Childbirth education: *Because of economic constraints, the educational and support needs of pregnant inmates are often not met. Education about labor and delivery is especially important for this population, as they are unlikely to be accompanied by family or friends during labor or delivery. Helping a woman know what to expect is likely to ease her anxiety.*

## Postpartum Issues

- **Newborn:** Postpartum adjustments are dominated by difficult decisions and limited choices about the disposition of the newborn child. Few on-site nursery programs in prisons exist nationally. Most newborns will be separated from their mother upon her discharge from the hospital. Child placement options are limited to family, friend, foster care, or adoption.
- **Breastfeeding.**

## Pregnancy Outcome

**Incarcerated women are at higher risk for preterm delivery and low birth weight than the general obstetrical population.**



- **As older prisoners is a growing population in the criminal justice system, management of their health needs is an increasing concern.**
- **>55 years 400.000 (in US).**
- **Prisons are generally not prepared to address the aging prisoner with medical comorbidities, functional impairment, or cognitive impairments.**
- **1 in 10 has a life sentence.**
- **No provision of palliative care services or “end of life care”.**

(Source: German TV Report, May 2018)

**In Children the Incarceration Process is a  
"series of crises":**

**cycle of arrest, incarceration, and reentry at  
home.**

## Situation

An estimated 5 Mio. (1 in 14) children in US have experienced the incarceration of a parent with whom they lived.

## In Parents Incarceration is frequently a marker of social vulnerability

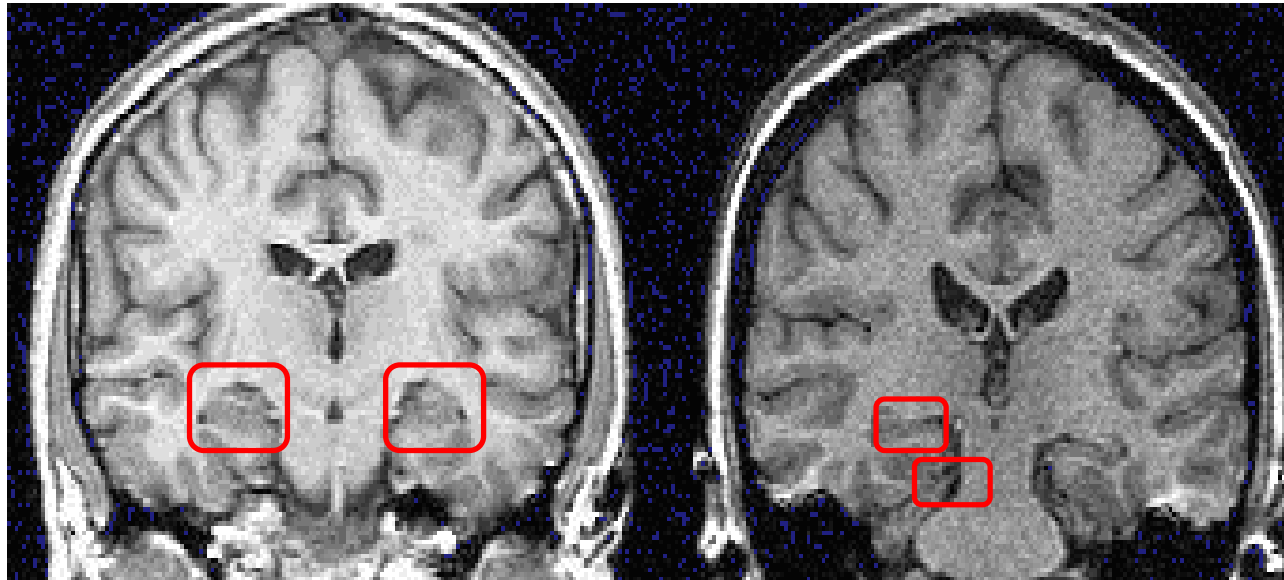
- $\frac{1}{2}$  had an immediate family member, parent, or sibling, incarcerated.
- Approximately  $\frac{1}{2}$  of inmate parents did not complete high school.
- More than  $\frac{1}{2}$  grew up in single-parent or kinship households.
- 12 % had childhood involvement with the foster care system.
- $\frac{1}{3}$  had a parent or a guardian who abused alcohol or drugs.
- Almost  $\frac{1}{3}$  of female and more than 10% of male inmates reported having been physically or sexually abused before age 18.

- **62% are mothers of kids in age < 18 years**
- **Many kids live alone with mother**
- **When mother is incarcerated kids are living:**
  - 37% with the other parent
  - 45% with grandparents
  - 30% with other family members
  - 11% with foster care

Source: Uptodate May 2017, Prenatal care of Incarcerated Woman

- Each step in the process of incarceration of a parent (arrest/sentencing, confinement, and release/parole) is a unique stressor for affected children.
- Children with incarcerated parents often have multiple risk factors for behavior and developmental problems, including poverty, parental substance use and mental illness, domestic violence, and inconsistent or unavailable caregivers.
- Behavioral reactions to parental incarceration may include sadness, social withdrawal, acting out, and/or aggression. These reactions can be mediated by high levels of social support.
- Parental incarceration is associated with juvenile delinquency, antisocial behavior, and health problems in adolescence, and may be associated with affective disorders and lifetime risk of attempted suicide.
- Pediatric healthcare providers should screen for parental incarceration as a risk for developmental, behavior, and health problems and provide age-appropriate counseling and information or referral for the child and family as indicated. Family/caregiver stress may be decreased by referring eligible families for financial support, housing and childcare assistance, and legal advocacy.

- One-half of affected children are younger than nine years.
- Their racial/ethnic backgrounds parallel those of the inmate population, with African-American children 7.5 times more likely, and Hispanic children 2.5 times more likely, to have an incarcerated parent than white children.
- Approximately one-half of parents in state or federal prison lived with their children before incarceration. This proportion is significantly higher for parents in local or county jails or when the mother is incarcerated.



NORMAL

PTSD

Bremner JD, Randall PR, Scott TM, Bronen RA, Delaney RC, Seibyl JP, Southwick SM, McCarthy G, Charney DS, Innis RB (1995): MRI-based measurement of hippocampal volume in posttraumatic stress disorder. *Am J Psychiatry* 152:973-981.

Finding	Replicability <sup>1</sup>
Decreased hippocampal volume	+++ <sup>2</sup>
Increased amygdala activity	+++ <sup>2</sup>
Decreased Broca's area (left inferior cortex) activity	+ <sup>2</sup>
Hemispheric lateralisation	+++ <sup>2</sup>
Decreased anterior cingulate cortex activation	++ <sup>2</sup>
Decreased <i>N</i> -acetyl aspartate in medial temporal regions	+
Activation in visual cortex	+ <sup>2</sup>

1. Replicability was rated as follows: (+) two, (++) three and (+++) four or more studies.
2. Inconsistent findings.

Source: Hull MA, MRCPsych (2002): Neuroimaging findings in post-traumatic stress disorder - Systematic review. The British Journal of Psychiatry (181: 102-110)



## The immediate period following release from jail or prison can be a high-risk time for drug users and others:

- A study in Scotland found a strikingly high risk of death from drug-related events in the two weeks following release from prison. The risk of non-drug related death in the two weeks following release was nearly five times the rate expected.
- Drug overdose was the most common cause of death according to data from death certificates, with other deaths attributed to cardiovascular disease, homicide, suicide, cancer, motor vehicle accidents, and liver disease.

- Supervise inmates in dedicated facilities when screening reveals a suicide risk.
- Provide cells without window bars and safer bed linens for high-risk inmates.
- Provide drug and alcohol detoxification facilities.
- Follow-up within 24 hours for inmates with a history of mental disorders.
- Follow-up within seven days for inmates discharged from inpatient prison healthcare facilities.
- Train correctional staff in recognizing, assessing, and managing suicide risk.

**„People being released from jail face numerous barriers to continuing to take daily medications, including high rates of substance use and serious mental illness, competing social media needs, stigma, and medical distrust.“**

- <http://www.uptodate.com/contents/clinical-care-of-incarcerated-adults>
- <http://www.uptodate.com/contents/developmental-and-behavioral-implications-for-children-of-incarcerated-parents>
- <http://www.uptodate.com/contents/prenatal-care-for-incarcerated-women>
- Fischer, Gottfried; Riedesser, Peter (2009): Lehrbuch der Psychotraumatologie. 4., aktualisierte u. erw. Aufl. München, Basel: E. Reinhardt (UTB, 8165).
- New Engl J Med 374 (18) p 1701 – 1703, p. 1704 -1706, May 5, 2016
- New Engl J Med 376, (2017), doi: 10.1056/NEJMp703375
- WHO/UNDOC 2011, Women's health im prison
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- WHO Bulletin 2009;87: 406. doi:10.247/BLT.09.066928 Women Health in Prison: urgent need for improvement in gender equity and social justice
- Bull WHO, 2011, 89,689-694. doi:10.2471/BLT.10.082842. Imprisonment and women's health.
- New Engl J Med 2023; 388, p. 559-564, February 9, 2023, DOI: 10.1056/NEJMms2208239
- New Engl J Med 2022; 387, p. 1728-1730, November 10,2022, DOI: 10.1056/NEJMp2209142
- Science Vol 374, Issue 6565, p. 282-286, October 14, 2021, DOI: 10.1126/science.abj7781
- Saloner B, Parish K, Ward JA, DiLaura G, Dolovich S. COVID-19 Cases and Deaths in Federal and State Prisons. *JAMA*. 2020;324(6):602–603. doi:10.1001/jama.2020.12528
- Science Vol 374, Issue 6565, p. 286-290, October 14, 2021, DOI: 10.1126/science.abj7779
- Lancet Glob Health. 2019; April Vol 7:e461-e471. doi:10.1016/S2214-109X(18)30539-4

# THANK YOU FOR YOUR ATTENTION! QUESTIONS?

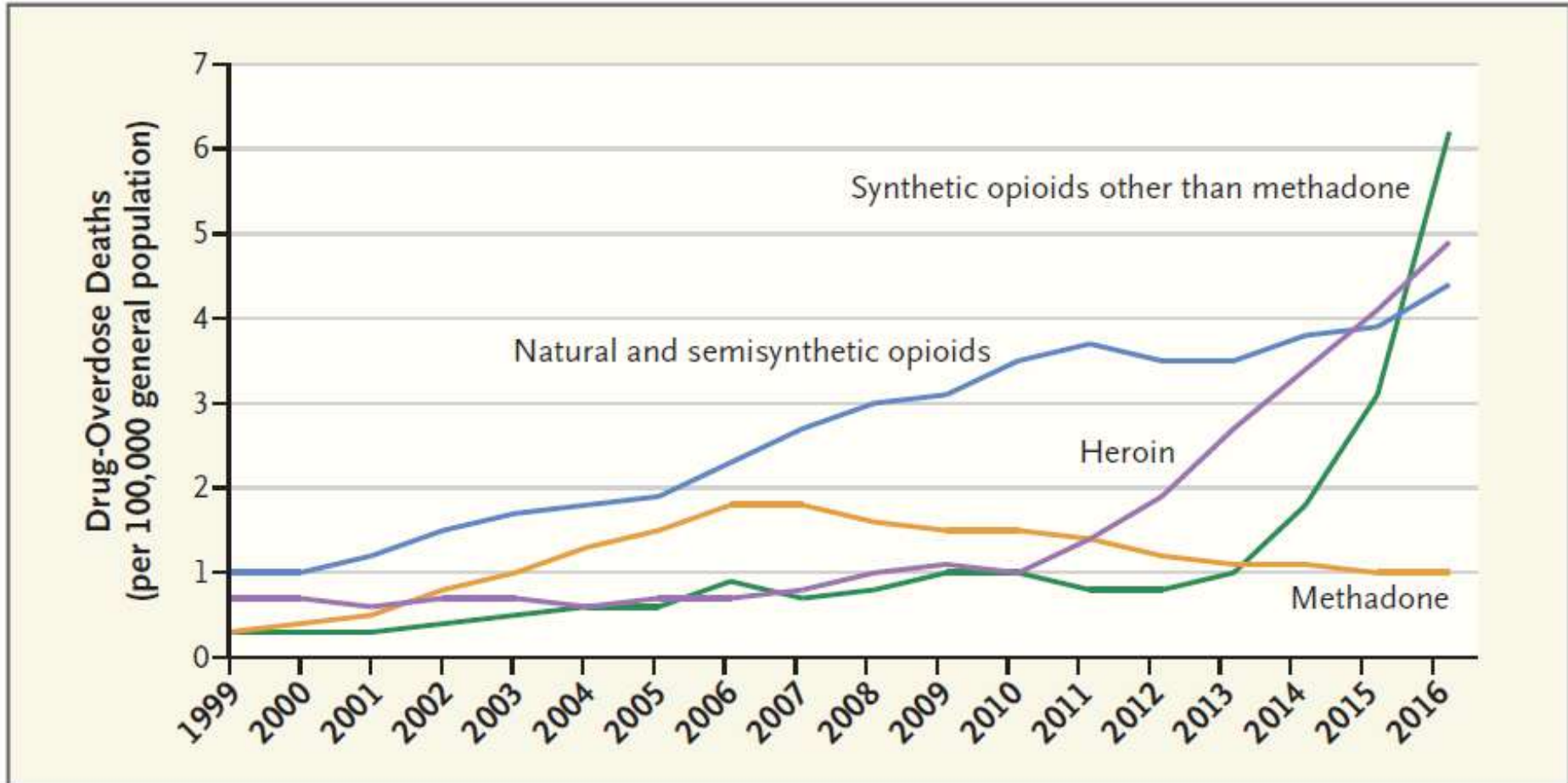
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# Drug-Overdose Death Rates by Type of Opioid, United States, 1999–2016



(NEJM April 26 2018, Evan Wood) Strategies for Reducing Opioid-Overdose Deaths  
— Lessons from Canada

# Rising prison admission and imprisonment rates for white and Black Americans from 1926 to 2010

Nr. 39

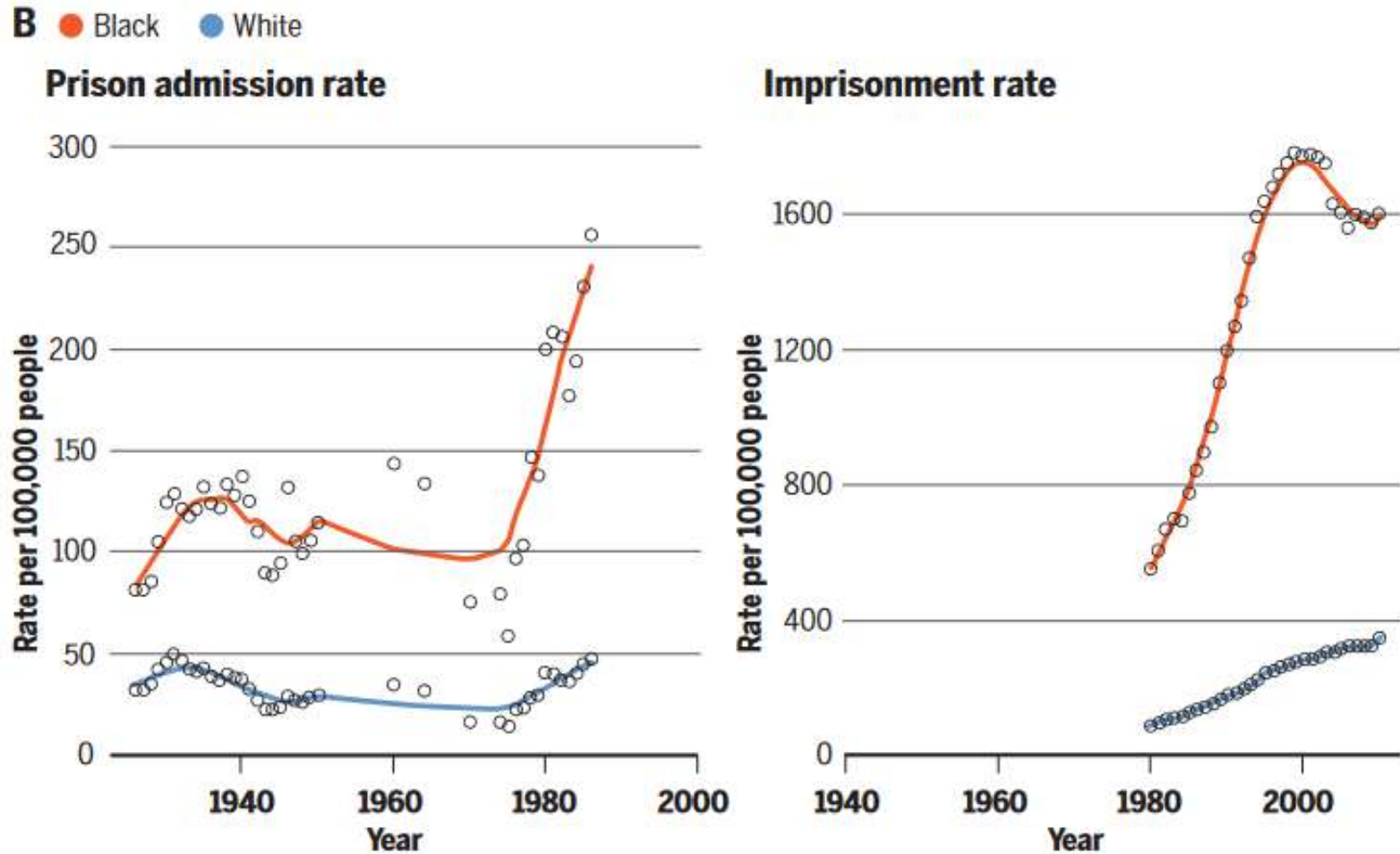


Figure: Trends in self-reported racial egalitarianism and societal incarceration rates.