Health Effects as Consequences

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Improving Collection of Indicators of Criminal Justice Involvement in Population Health Data Programs

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prisons and health

- ***selection v. causation***
  - *Massoglia, Schnittker find contingencies: space, time, conditions of care*
  - *expert colleagues – I'm still learning*
- ***counterfactuals & health baselines***
  - *Patterson & African American v. community*
  - *infectious disease and stress-related conditions*
- ***project orientation***
  - *identifying unhealthy punishment ("piling on")*
  - *permeability of prison walls*

piling on & formal & informal collateral consequences

[*MN Law Review* 2015, w/ Stewart; 2012 *Handbook* w/ Ewald]

- ***collateral consequences***
  - *economic, social, physical, civic exclusions and disabilities (ABA/NIJ national inventory)*
- ***experienced in combination (but studied in isolation)***
  - *in US football, illegal to "pile on" a downed player b/c unnecessary, injurious, & slows the game's progress*
- ***6 "model probationers" in Minneapolis***
  - *health and health care tied to employment and housing*
  - *from low-level arrest to conviction for sex crimes*

how consequences work

- ***Michael: felony DWI***
  - *social work degree, licensing restrictions, petition, relocation, county commission, then "after two months of working, I get pulled into the office by the director and my supervisor. [They said] 'you are great at what you do and a fantastic social worker, but we don't think it's a good fit here because of your past.' So they gave me the option of being terminated or resign."*
- ***Alex: failure to register***
  - *arrived illegally with parents but got green card; statutory rape at 16, then failed to register as sex offender; no convictions since 2007; ICE finds failure to register warrant in 2014; detention and threatened deportation*

plan

scale
Growth of ex-prisoner population

individual health
Prison effects on psychiatric disorders

community health
Contingent effects at state level

health care system
Spillover effects on care available to others

policy moment and next steps
From the White House to public dissemination

leverage ex-prisoner change over state & time

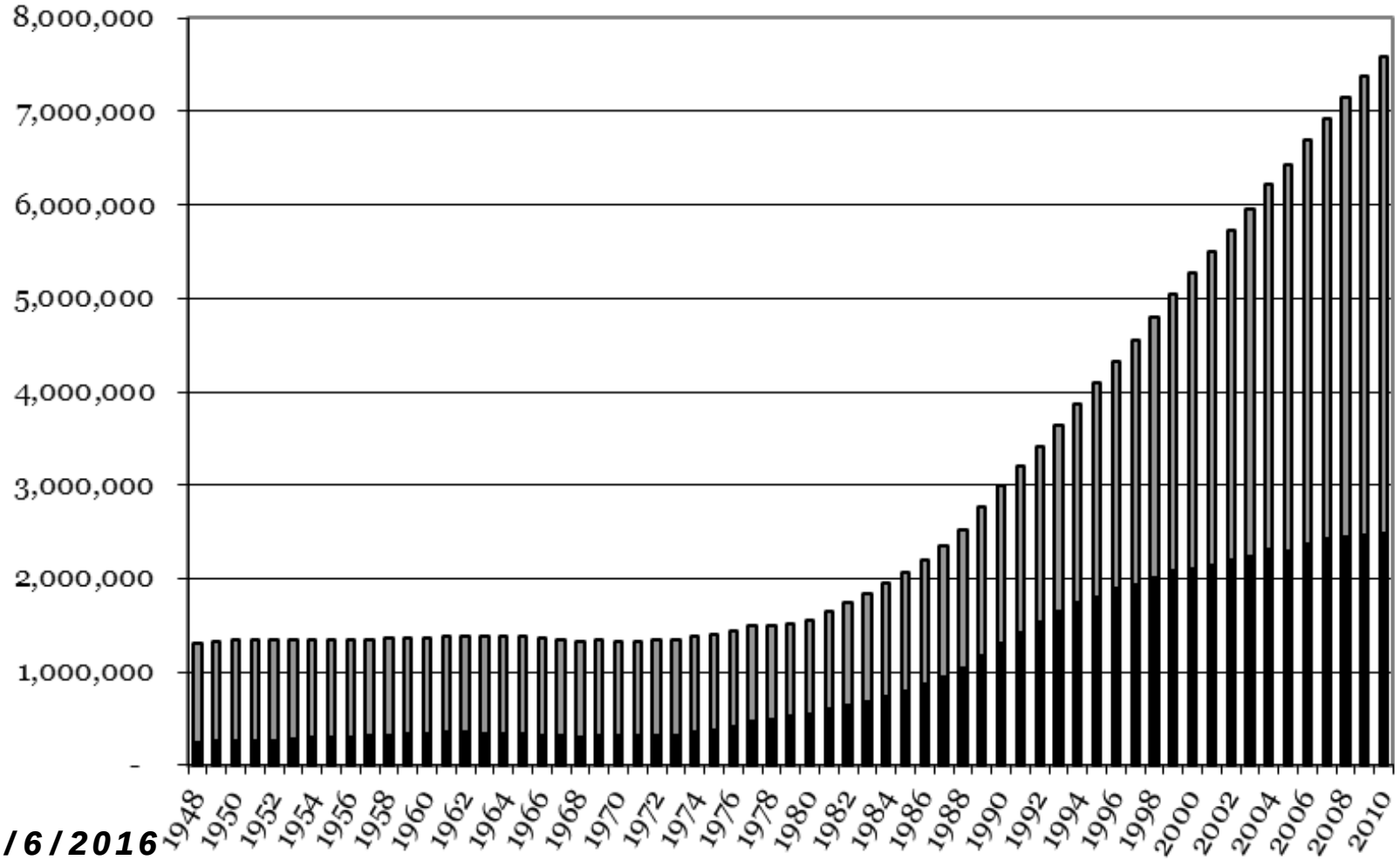
[at *Demography*, w/ Wakefield, Schnittker, Massoglia, Shannon]

- ***no registry but excellent stock & flow data***
  - *number exiting prison since 1920s*
- ***reductions for recidivism & mortality***
  - *66% lifetime rate (57% for probationers)*
  - *high mortality*
  - *interstate mobility*
- ***simplifying assumptions***
  - *200+ spreadsheets, 63 years of data*

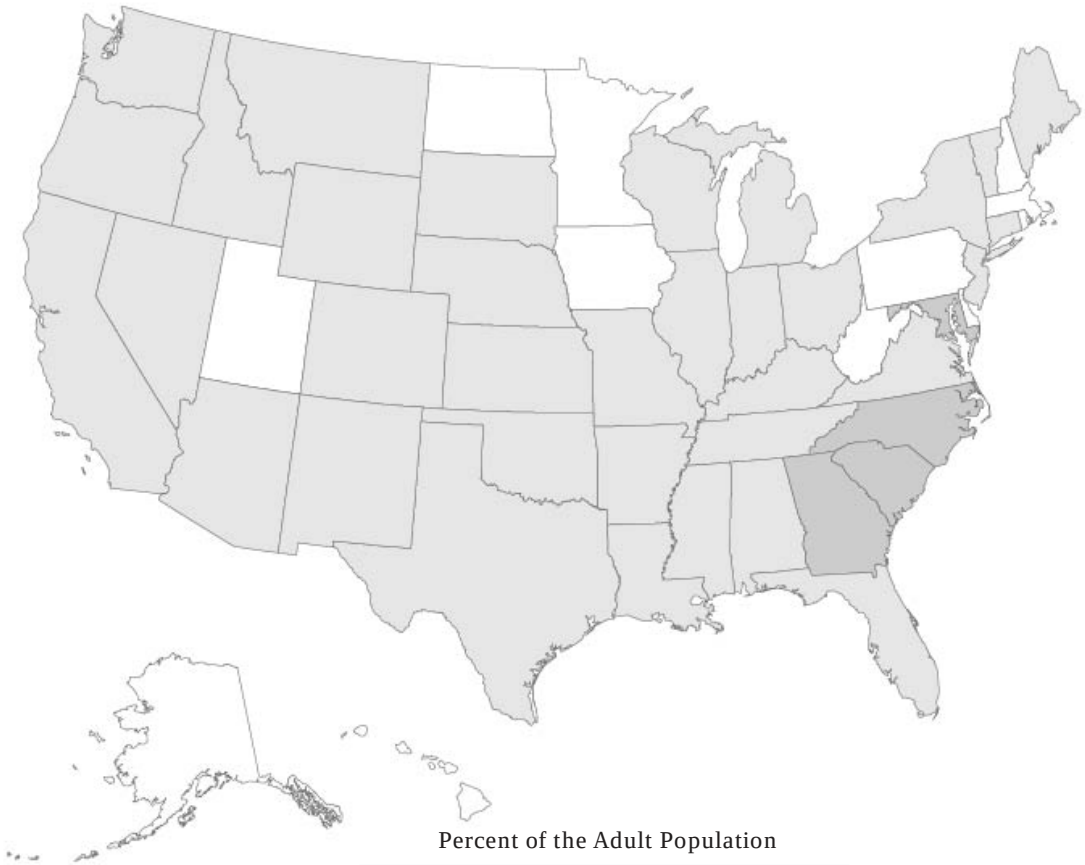
current and ex-prisoners

- ***current*: 2.5 million in prison and on parole**
  - *2% of adult males*
  - *5% of African American adult males*
- ***ex*: 5.1 million former prisoners**
  - *our original state-level estimates, 1948-2010*
- ***total*: 7.6 million in 2010**
  - *3.3% of adult population*
  - *6% of adult males*
  - *15% of African American adult males*
- **spatial and racial distribution**

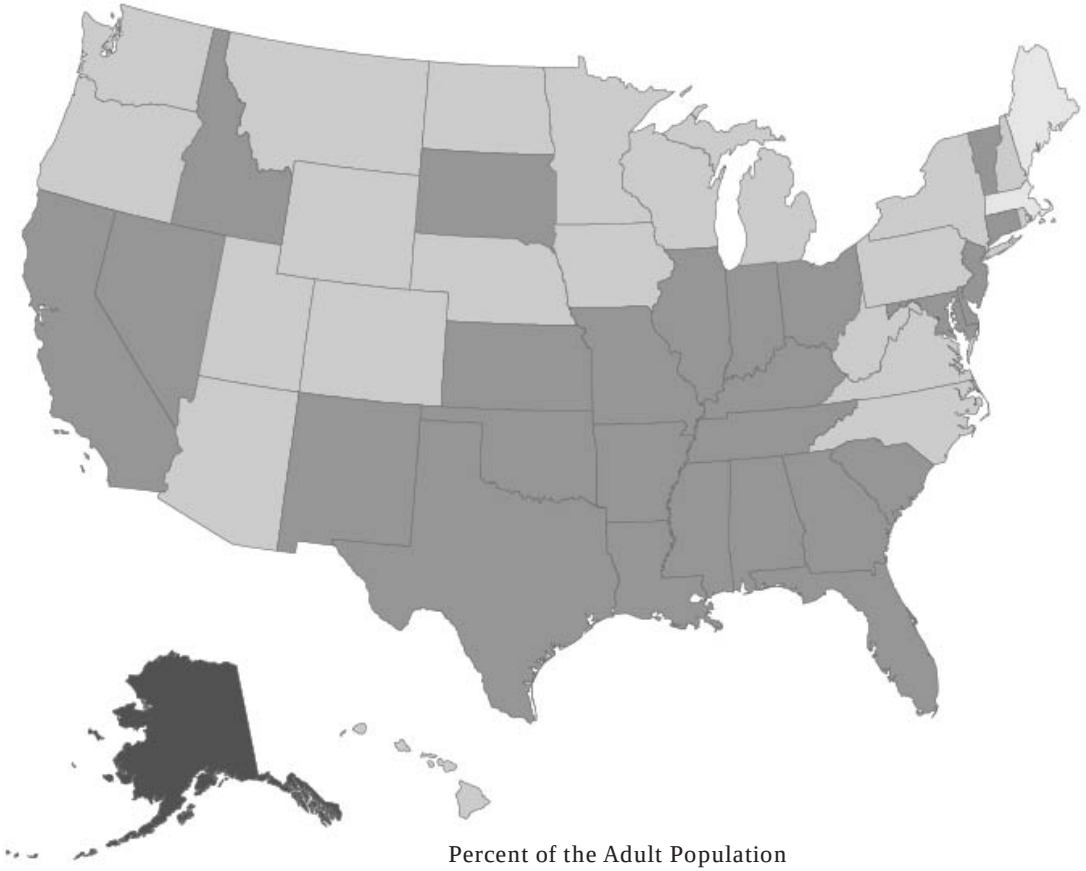
growth of prisoners & former prisoners, 1948-2010



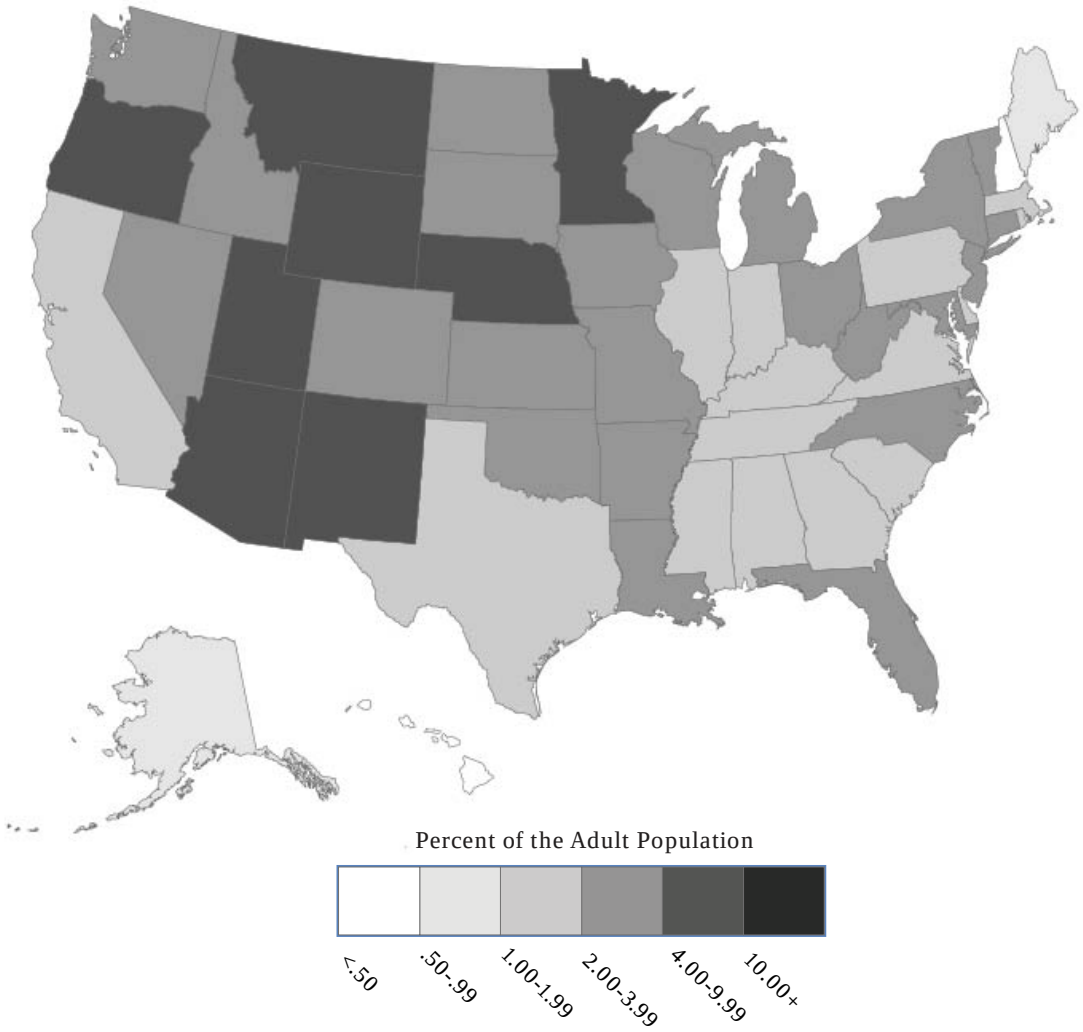
1980 ex-prisoners
(.6% of VAP; 1.1% of males)



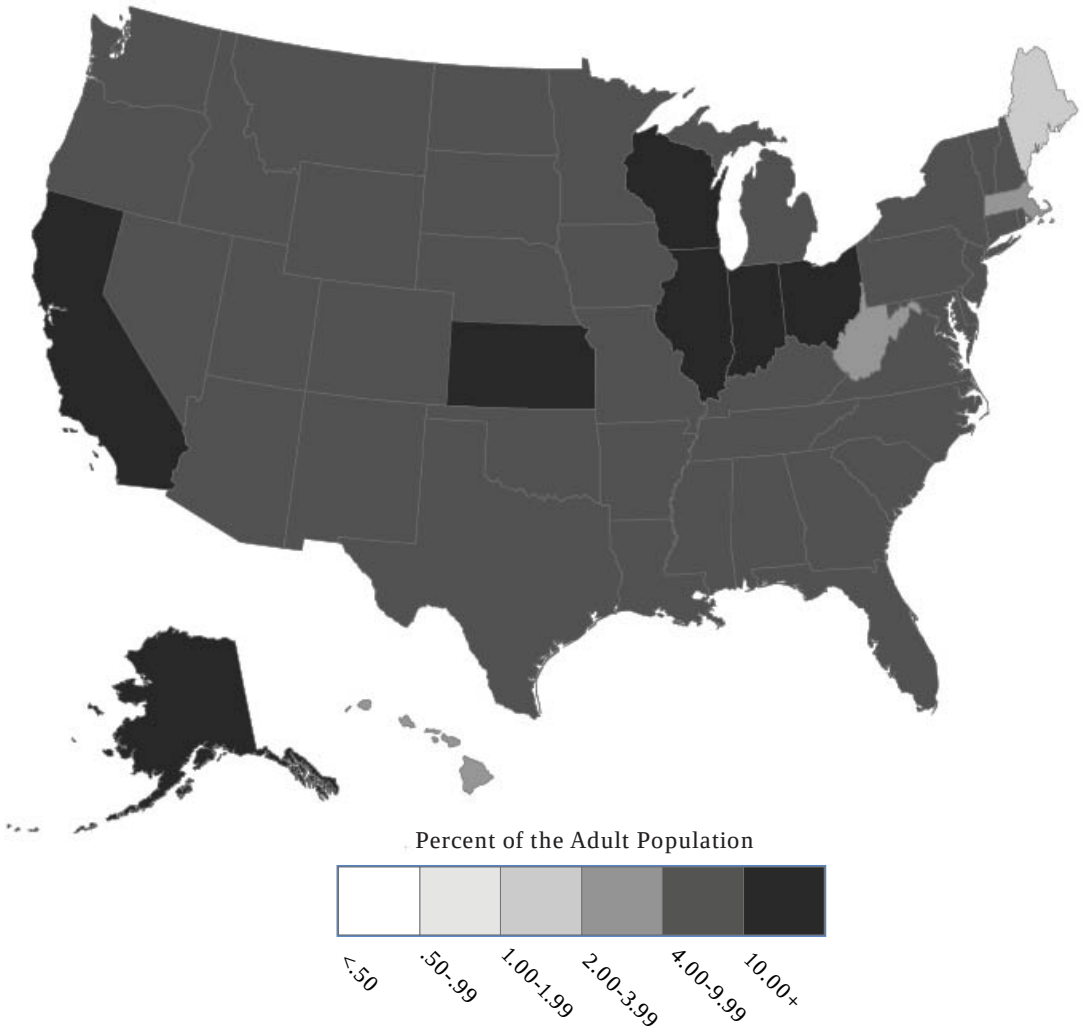
2010 ex-prisoners
(2.2% of VAP; 3.9% of males)



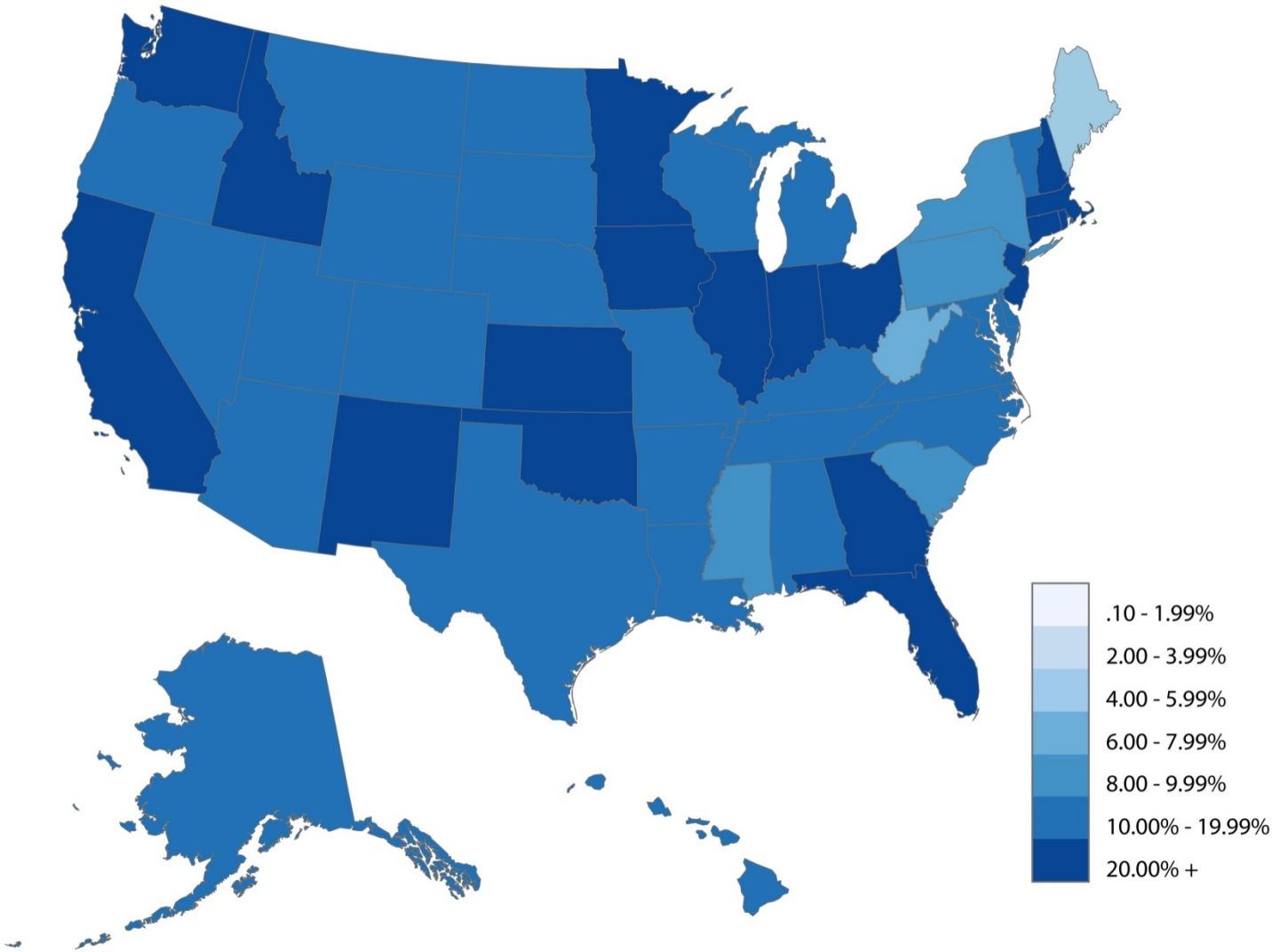
1980 African American ex-prisoners
(1.7% of VAP; 3.3% of males)



2010 African American ex-prisoners
(6.7% of VAP; 10.4% of males)



2010 African American ex-felons
(18.3% of VAP, 25.4% of males)



individual mental health

[*Journal of Health & Social Behavior* 2012]

- ***Working H_1: Prison has strong global effects on mental illness***
  - *Stress versus selection*
  - *Physical health effects*
- ***Not exactly: longitudinal work shows selection and possible causation***
  - *Possible causation for mood: major depression, bipolar, and dysthymia*
  - *Likely selection for anxiety: panic, agoraphobia, social phobia (PTSD, maybe)*

ex-prisoners & community health

state rates

[at *ASR* w/ Schnittker, Massoglia, Shannon]

- ***Working H_1: Higher incarceration rates will have strong global effects on disease rates***
  - *Tuberculosis as exemplar*
- ***Not exactly: screening and treatment are countervailing mechanisms***
  - *Contingent Effects: Where there is robust testing and treatment, ex-prisoners associated with lower disease rates (everybody tested for TB, syphilis)*
  - *Versus little testing and treatment (chlamydia)*
  - *Time and sex interactions (HIV- change after 2003)*
  - *Prison (+/-) versus community supervision (0)*
- ***Likely transmission (women) & detection/treatment (men) mechanisms***

prison screening

Disease	*Prisoners*[1]	*Prisons*	
		Mandatory or Routine[2]	Mandatory, Routine, or Regularly Offered[2]
Tuberculosis	95.1%	-	-
HIV	73.1%	39%	76%
Syphilis	-	76%	83%
Chlamydia	-	20%	40%
Gonorrhea		17%	37%

[1] Percentage of state prisoners who reported having their skin ever pricked to test for TB or their blood ever tested for HIV. *Source: Medical Problems of Prisoners*, 2004.
[2] Percentage of prison facilities that reported having mandatory, routine, or regularly offered testing for these diseases. *Source:* Hammett et al. *National Survey of Infectious Diseases in Correctional Facilities: HIV and Sexually Transmitted Diseases*. March 2007.

Negative Binomial Models Predicting Annual Tuberculosis Incidence

[each percentage-point increase in former inmates associated w/ 8% reduction in expected TB cases (exp(-.087) = .92)

Variables		
State Ex-Prisoner Population		
% Ex-Prisoners (1-Year Lag)	-.097***	-.087***
	(.026)	(.026)
Other Controls		
Time-varying Control Variables		√
Year Fixed-Effects	√	√
State Fixed-Effects	√	√
Observations	900	900
Pseudo *R*-squared	.24	.24
States	50	50
Years	1993-2010	1993-2010

* $p < .05$; ** $p < .01$; *** $p < .001$

Note: Standard errors in parentheses. Time-varying control variables include percent below poverty, percent uninsured, percent unemployed, percent African American, Republican governor, and the rape/sexual assault rate.

Negative Binomial Models Predicting Annual Chlamydia, Gonorrhea, and Syphilis Incidence

[each percentage point increase in former inmates associated w/ 40% greater incidence of chlamydia for men, 61% for women]

Panel A. Male Incidence	**Chlamydia**	**Chlamydia**	**Gonorrhea**	**Gonorrhea**	**Syphilis**	**Syphilis**
State Ex-Prisoner Population	.381***	.338***	.013	-.005	-.128*	-.113*
% Ex-Prisoners (1yr Lag)	(.063)	(.062)	(.030)	(.028)	(.054)	(.055)
Other Controls						
Time-varying Control				√		√
Variables		√				
Year Fixed-Effects	√	√	√	√	√	√
State Fixed-Effects	√	√	√	√	√	√
Observations	1137	1137	1199	1199	1200	1200
Pseudo R-squared	.07	.07	.16	.17	.16	.16
States per year	36-50	36-50	49-50	49-50	50	50
Years	1987-2010	1987-2010	1987-2010	1987-2010	1987-2010	1987-2010

Negative Binomial Models Predicting Annual Chlamydia, Gonorrhea, and Syphilis Incidence

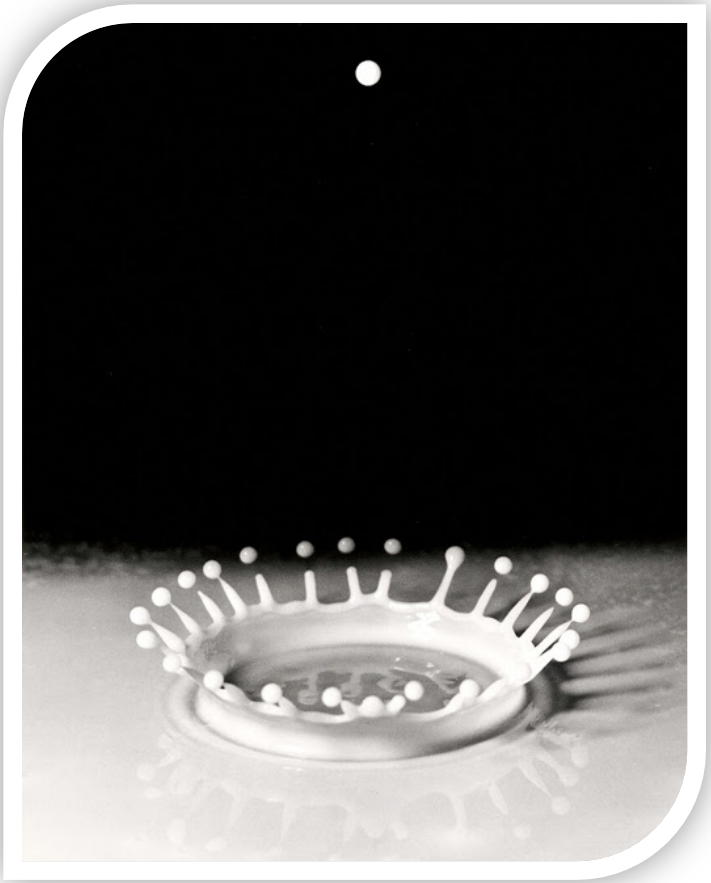
Panel B. Female Incidence	**Chlamydia**	**Chlamydia**	**Gonorrhea**	**Gonorrhea**	**Syphilis**	**Syphilis**
State Ex-Prisoner Population	.475***	.457***	.120***	.118***	-.012	.011
% Ex-Prisoners (1-Yr Lag)	(.067)	(.067)	(.030)	(.029)	(.061)	(.060)
Other Controls						
Time-varying Control				√		√
Variables		√				
Year Fixed-Effects	√	√	√	√	√	√
State Fixed-Effects	√	√	√	√	√	√
Observations	1146	1146	1199	1199	1200	1200
Pseudo *R*-squared	.04	.04	.15	.16	.18	.18
States	36-50	36-50	49-50	49-50	50	50
Years	1987-2010	1987-2010	1987-2010	1987-2010	1987-2010	1987-2010

* $p < .05$; ** $p < .01$; *** $p < .001$

Note: Standard errors in parentheses. Gonorrhea was not reported by Georgia in 1994. Chlamydia reported was not mandated until 1996. Prior to that most states reported and the number reporting increased each year.

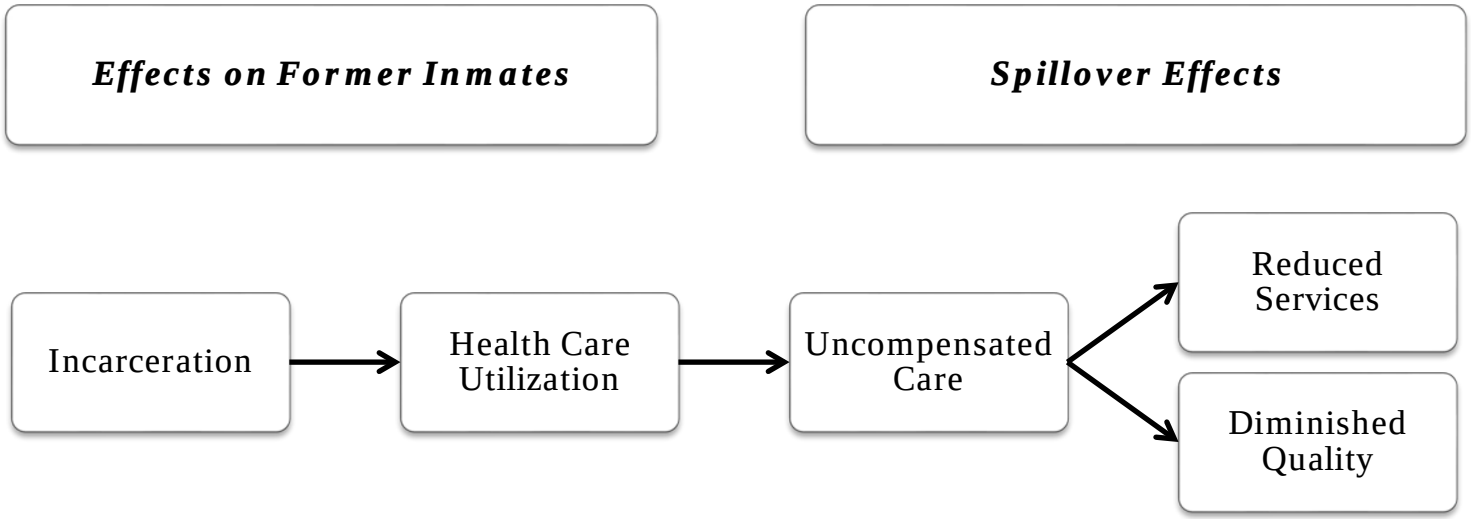
HIV

- ***In all models, incarceration increases deaths from HIV/AIDS***
  - *Among men, a percentage-point increase in the percent ex-prisoner leads to a 7-17% increase in deaths from HIV/AIDS*
  - *Among women, the associations range from 21-27%*
- ***But this association is contingent on time***
  - *From 2003 on, the relationship has declined among men*
  - *Better prison detection and treatment may be contributing to a decline in deaths in the population over time*



health spillovers

how spillovers might work



care available to others

[*Milbank Quarterly* 2015 w/ Schnittker, Shannon, McElrath]

- ***Working H_1: High rates of ex-prisoners will worsen most community health outcomes***
  - *increased health care demand and uninsurance*
  - *burden of financing care of the uninsured affects the availability of health care to others*
- ***Exactly (within limits of analyses)***
  - *As rate of ex-prisoners rises in a state, its residents will have less access to care and specialists, reduced physician trust, and less satisfaction w/ care.*
  - *capacity: affects percent uninsured, ER visits, beds*
  - *quality: affects ambulatory visits, mammograms, annual tests (hemoglobin, eye exam, blood lipids)*
- ***Breadth***
  - *affects insured, over 50s, women, non-Hispanic whites.*

policy moment

health consequences

1. Prison effects on health are real, consequential, and not always negative

- *Imprisonment powerfully transforms the lives of those who serve time. It creates and reinforces inequalities, but can also redress inequalities in health and human capital -- and to improve prospects for inmates and the communities to which they return.*

2. The health of prisoners profoundly affects other citizens and health care consumers

- *[Low] community baselines may change*
- *Interdependence of prisoners and others*

collateral sanctions more generally

- ***the policy moment***
  - *receptive audience and recognized need for change: voting, kids, LFOs, health, "bystanders" and communities*
- ***state demography, partisanship & consensus***
  - *"fewer prisoners and more taxpayers"*
  - *"excess punishment" as non-utilitarian*
  - *NRC & White House*
- ***necessary and reasonable v. piling on***
  - *Cam's lie detector; Dennis' parental rights*

limiting "piling on"

- ***cataloging***
  - *federal/state/local collateral consequences*
- ***notification***
  - *costs of collateral consequences*
- ***sunsetting***
  - *remove restrictions after pre-specified period*
- ***tailoring***
  - *individual imposition of specific sanctions*
- ***abolition***
  - *felon voting bans, public assistance bans…*
- ***restricting access to certain criminal records***
  - *arrest v. conviction*

US institutional change

- ***health: ACA and baseline community health***
  - *continuity of care and spillover*
- ***work: 19+ states, 100 cities "ban the box"***
  - *MN & Obama EO, no check until "finalist" (interviews)*
- ***welfare: more opting out of ban***
  - *12 states "opted out" or reduced scope of ban*
- ***voting: 2016 election; VA as latest***
  - *24 states expanded voting rights to over 1m since 1997*
- ***ongoing research***
  - *education, monetary sanctions, housing, military service…*

supplemental