#### **UCLA ISAP Research Training Series**

## Substance Abuse Treatment in Criminal Justice Settings

David Farabee, Ph.D.

UCLA Integrated Substance Abuse Programs

Semel Institute for Neuroscience and Human Behavior

David Geffen School of Medicine at UCLA



## Prevalence of Drug Use Among Offenders



#### Arrestee Drug Abuse Monitoring (ADAM) Survey

- Use of any drug among arrestees in 2010 ranged from 52% to 83% across U.S. cities.
- Marijuana was most common.
- Opiates showed the greatest increases over the past 5 years.

# International Incarceration Rates of Drug Offenders

Region	Proportion of Total Prison Population
European Union	3%-42%
Europe (Non-EU)	4% -29%
Americas	5%-53%
Asia/Oceana	10%-58%

Source: Beckley Foundation (2009)

## **Drug-Crime Nexus**

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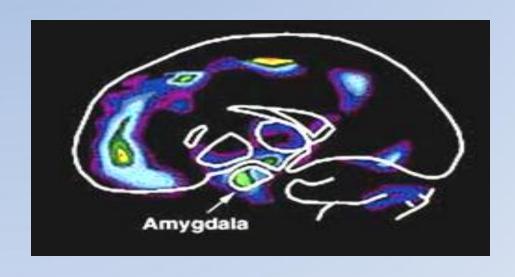
#### Routes of Influence

(Source: Goldstein, 1985)

#### **Economic-Compulsive**

Intentional crime that results from drug users engaging in an economically oriented crime to support their own addiction.





#### Pharmacological

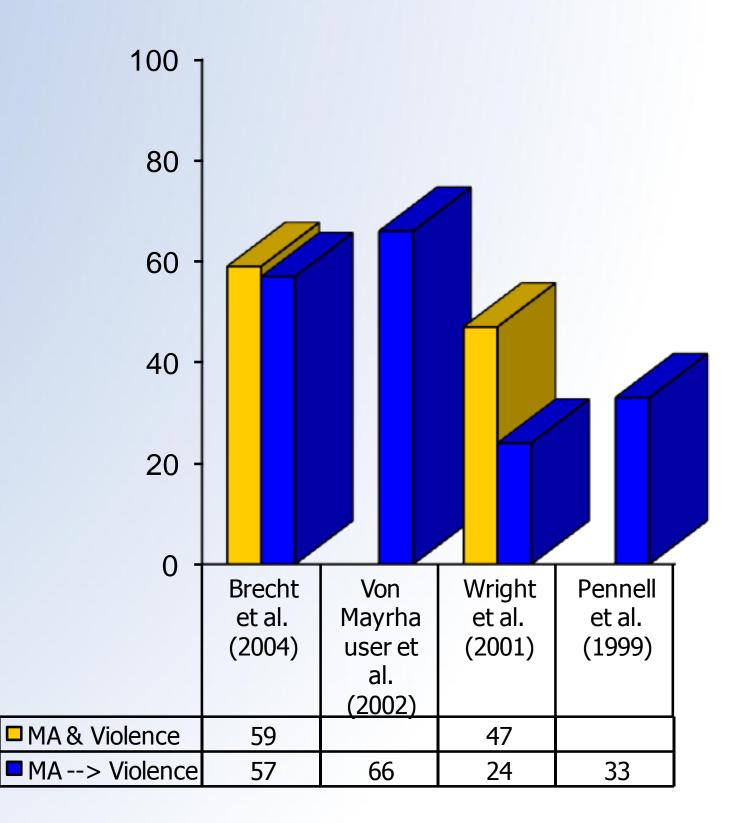
Crimes that occur as a result of the excitability, paranoia, or poor impulse control associated with use of certain drugs.

#### Systemic

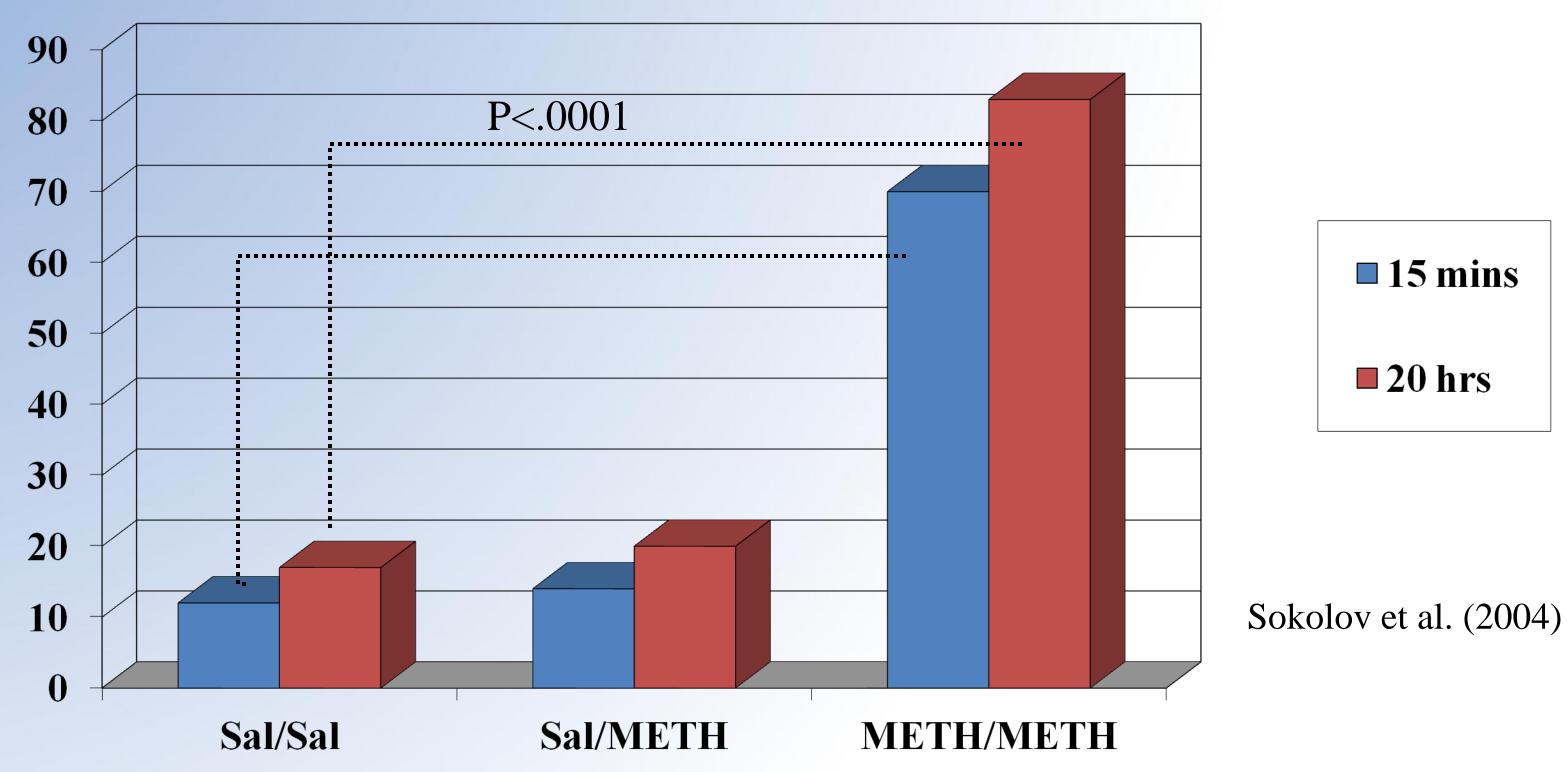
Crimes associated with drug manufacturing and distribution.

## Methamphetamine Use and Violence

- Studies testing cooccurrence and/or causation
- About 50% of MA users report engaging in violence
- A quarter to two- thirds attributed violence to
   MA use



## % of Mice Initiating Attack (15 mins & 20 hrs After Last Dose)

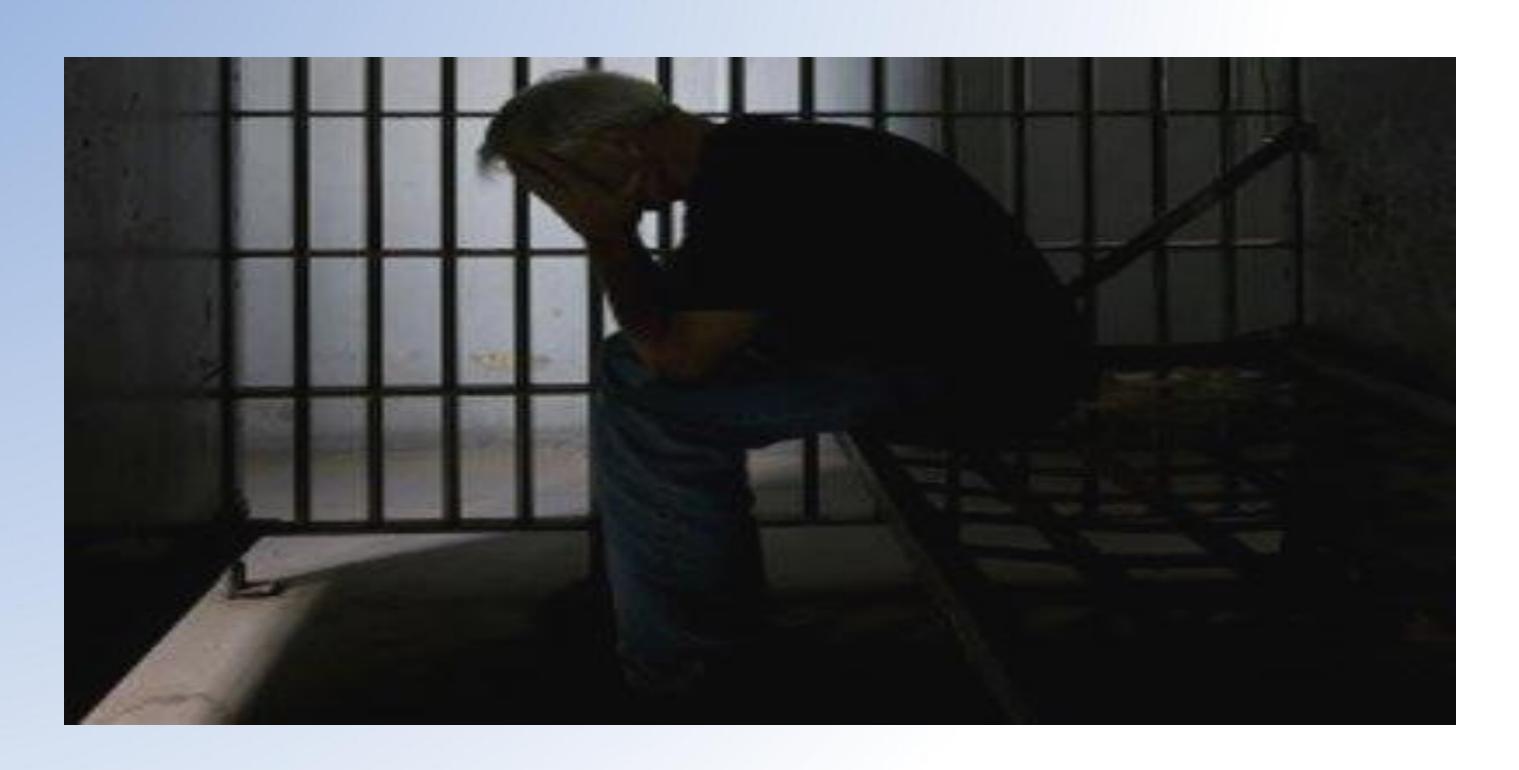


#### Violence: The Big Picture

- Most alcohol and drug use occurs among persons who are not violent.
- Individual histories of aggression and violence are key to predicting whether drug use will increase these behaviors.
- Alcohol is more closely related to murder, rape, and assault than any other substance.

For a review, see Boles & Miotto (2003). Aggression & Violent Behavior, 8, 155-174.

## **Drug Use Behind Bars**



#### **General Prevalence**

- In the U.S. random urine tests reveal prevalence ranging from 1% - 31%;
- A survey of inmates (N=3,142) in all prisons in the UK found high levels of drug use: marijuana, 76.7%; amphetamines, 48.7%; cocaine/crack, 45.9%; and heroin, 38.3%.
- Initiation of drug use while in prison was also high, particularly for heroin (26.4%).

#### **Disease Transmission**

- In the U.S., there is a self-reported injection rate of about 15%.
- A survey of Canadian inmates indicated that 11% reported injecting drugs while in prison.
- Of those who report injecting in UK prisons, around 75% said that they shared needles;
- Among IDUs in Tehran, a history of shared needles in prison was the strongest predictor of being HIV+.

#### Reducing Inmates' Drug Use

- Replacement therapy
  - Since 2002, Iran has increased MM access from 11 to 25,000+ prisoners.
- Drug-free units
  - Contractual arrangement for inmates to have better living arrangements in exchange for abstinence.
- Random drug testing
  - U.S studies show immediate declines of ~75%

# Assessing Drug Use and Treatment Needs Among Offenders



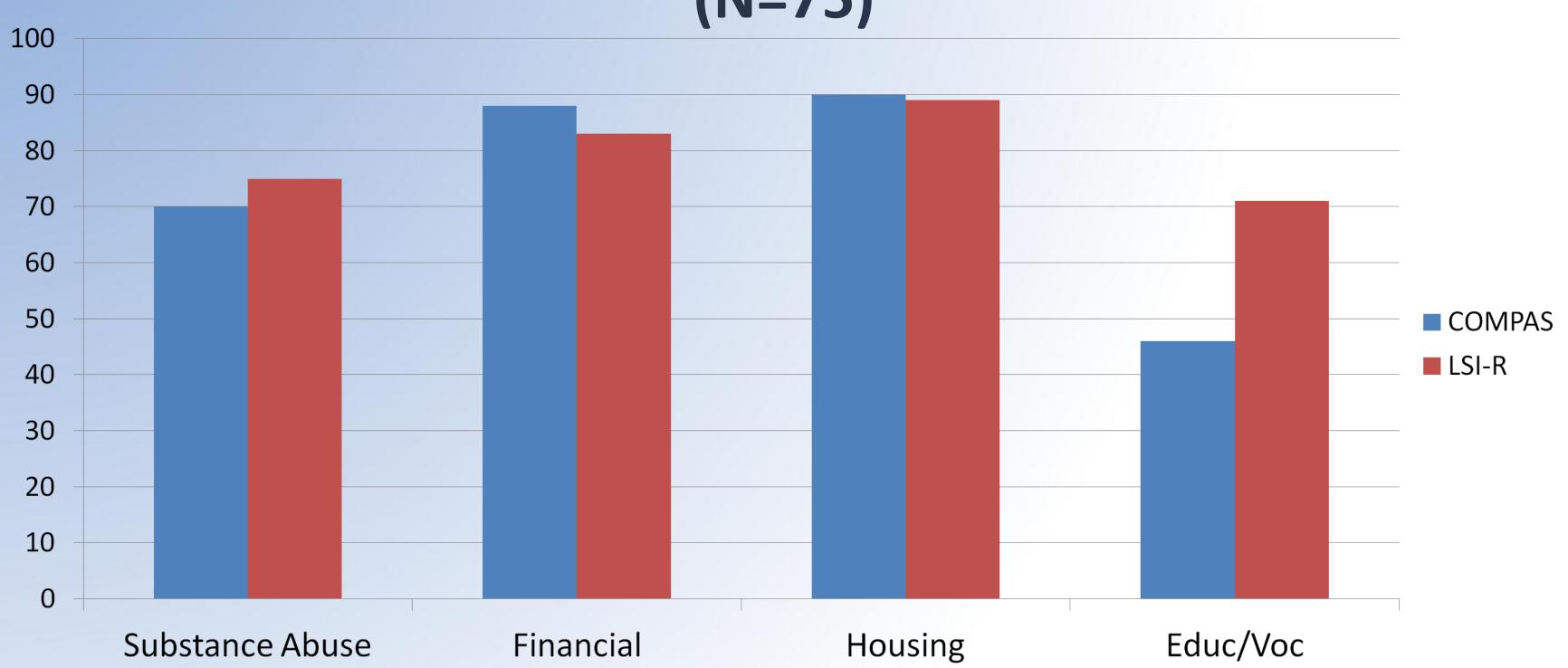
#### **Beware of the Cost and Time Illusion!**

- Expensive assessments are not necessarily better than their free counterparts;
- More questions do not guarantee more valid measurement.
- Two examples:
  - Rosenberg Self Esteem Scale
  - DAST-10

## Four Yes/No Questions:

- Do you need substance abuse treatment?
- Do you need help earning a high school diploma/GED?
- Do you need help learning skills that will help you find employment?
- Do you need help finding a safe place to live?

## % of "High-Need" Inmates Identified Using Single Item (N=75)



#### Interventions for AOD-Involved Offenders



**Drug Courts** 

**Testing and Sanctions** 

Pharmacotherapies



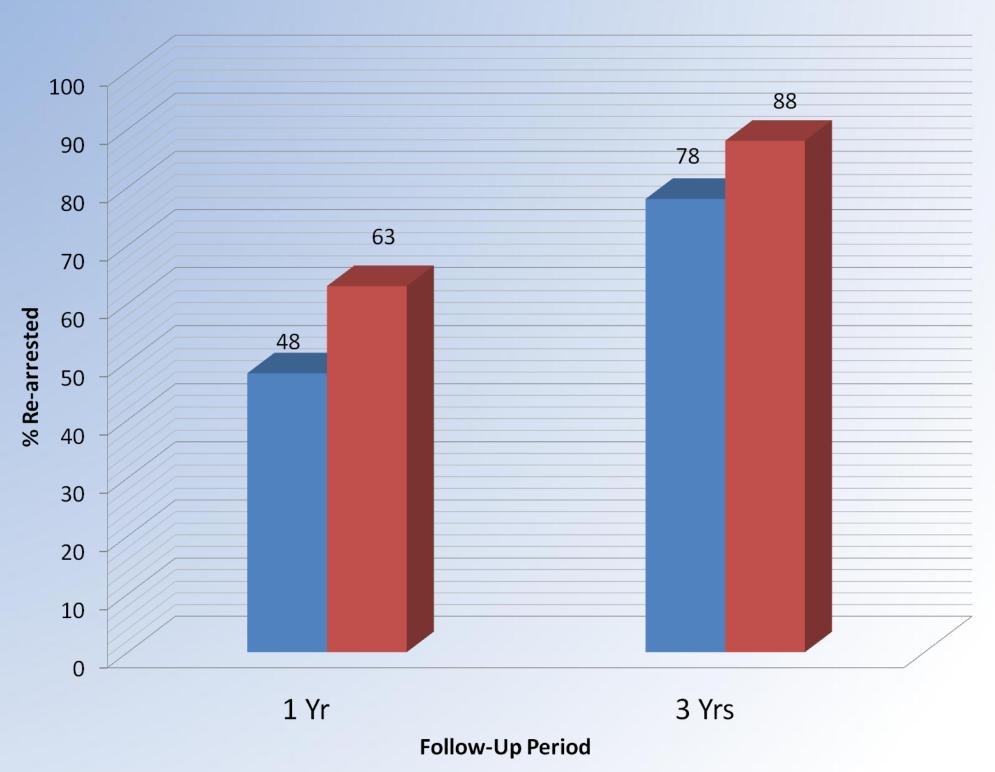
## **Drug Courts**

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#### **Overview of Drug Courts**

- First established in Florida in 1989
- More than 2,500 drug courts currently exist in the U.S.
- Emphasis on treatment, regular court hearings, frequent testing, and graduated sanctions

# Baltimore City Drug Court (Re-arrests at 1 & 3 Yrs)



■ Treatment (n=139)■ Control (n=96)

Gottfredson et al. (2006)

#### GAO Review (2005)

- 117 drug court evaluations between May 1997 and January 2004
  - 27 were selected
- Must have comparison group
- Must have recidivism, drug use, or completion outcome
- 8 of the studies provided cost-benefit data

#### **GAO Findings**

- Typical program lasts about 1 year
- Completion rates range from 27% to 66%
- Drug court participants were less criminally active than nonparticipants (both during and after treatment)
- Drug test results showed lower use among drug court participants while in treatment, self reported levels did not differ
- Cost savings ranged from \$1,000-\$15,000 per participant

"[W]e were unable to find conclusive evidence that the specific drug court components, such as the behavior of the judge, treatment provided, level of supervision, and sanctions for noncompliance affect the participants' [outcomes]" (GAO, 2005; p.6)

## **Testing & Sanctions**

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#### **Testing & Sanctions**

- Regular, random drug testing
- Swift and certain consequences for positive tests
- No a priori assumption of the need for treatment

#### The HOPE Program

- Warning hearings
- H.O.P.E. hotline
- > 1 weekly random drug testing (6x per mo)
- Every violation (e.g., dirty UA or missed appointment) leads to an immediate arrest and sanction
- Short terms, typically 2 days (served on weekend if employed). Terms increase for repeat violations.

## **Experimental Outcomes**

Outcome	HOPE	Control
No-shows for probation appointments (average	9%	23%
of appointments per probationer)		
Positive urine tests (average of tests per	13%	46%
probationer)		
New arrest rate (probationers rearrested)	21%	47%
Revocation rate (probationers revoked)	7%*	15%
Incarceration (days sentenced)	138 days*	267 days

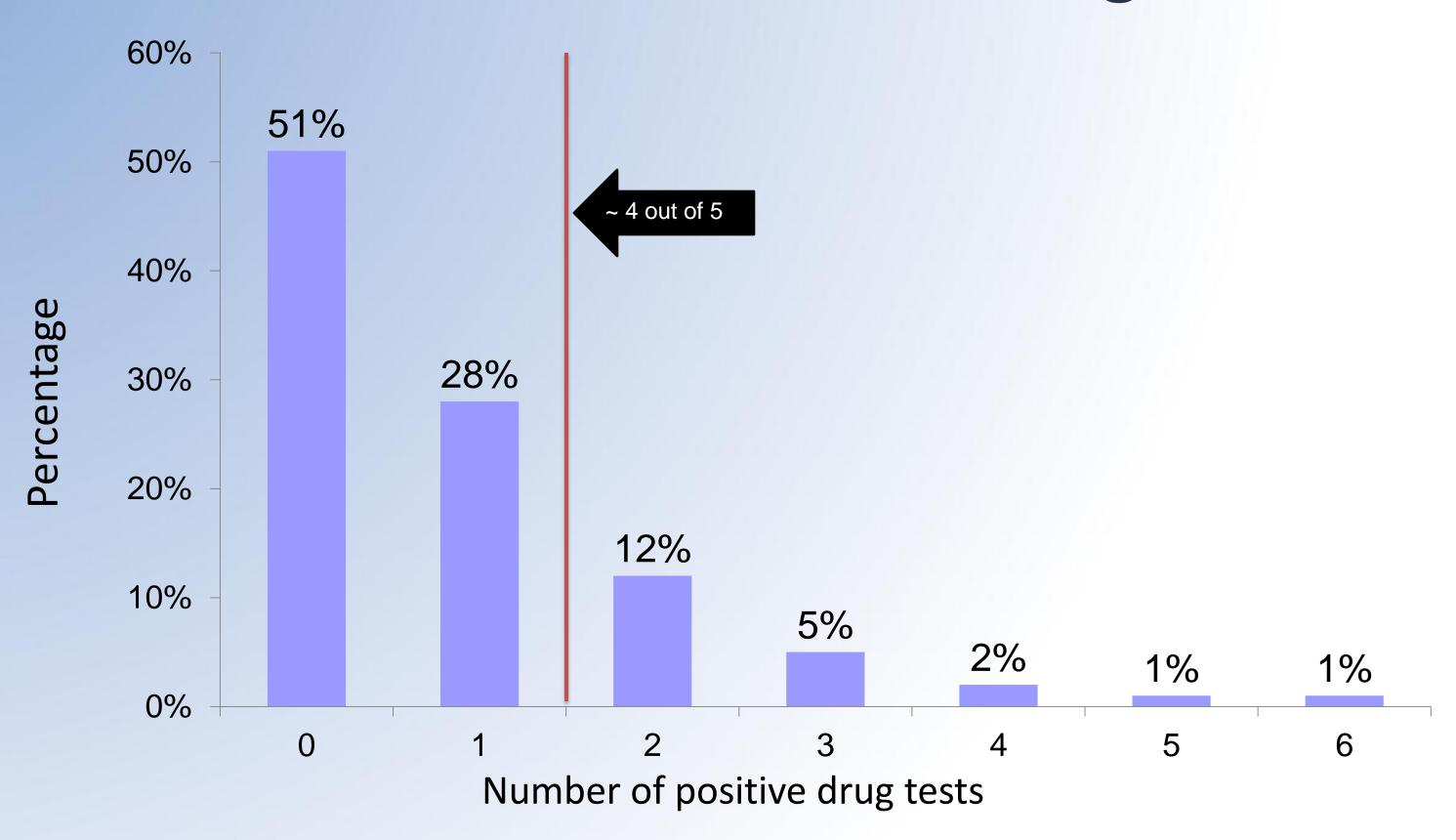
## **Behavioral Triage Model**

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## **Behavioral Triage Model (BTM)**

- Treatment decisions based on probationers' revealed behavior
- Allocates treatment resources more efficiently
  - Under diversion programs many probationers mandated to treatment do not have a diagnosable substance abuse disorder, wasting scarce treatment resources and displacing self-referrals in greater need of care.

#### Distribution of Positive Drug Tests



## **Pharmacological Treatments**

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#### Overview

- Only approved for opiates
- Can be used for detoxification & maintenance
- Most common:
  - Methadone (full μ-opioid agonist)
  - Buprenorphine (partial agonist)
  - Naltrexone (antagonist)

#### Methadone Maintenace vs. Buprenorphine

- MM
  - Most common
  - High adherence
  - Superior to drug-free approaches in retaining patient in treatment and in the suppression of heroin use (RR=0.32), but not in criminal activity (RR=0.39)

- Buprenorphine
  - Less powerful
  - Lasts longer
  - < risk of withdrawal</p>
  - At high doses, better than placebo
  - Not superior to MM

\*www.cochrane.org

#### **Oral Naltrexone**

- Taken every 1-3 days (50-150 mgs per tablet)
- Full opioid antagonist
- Mitigates effects of alcohol
- Adherence is extremely low (90% attrition in first few weeks)

#### **Depot Naltrexone**

- A single injection lasts for ~ 30 days.
- A comparison of depot naltrexone and MM among released heroin-dependent inmates showed that both were associated with reductions in opiate use and crime (Lobmaier et al., 2010).
- Avoids the problem of non-compliance, eliminates risk of diversion (a common problem with buprenorphine), and lessens the need for frequent visits to clinic or physician's office.

#### Summary

- Drug use is the norm among criminal offenders, and drug offenders account for more than half of the prison populations in many countries.
- The drug-crime relationship is complicated but multiple human and animal studies suggest a causal effect of stimulant use and violence.
- Drug courts generally show promise in reducing drug use/crime, but critical components are still unspecified.

#### Summary

- Testing and sanctions have been shown to be more effective than treatment, and cost significantly less, but testing must be frequent and random, and sanctions must be certain.
- Severe sanctions are not necessary to produce behavior change.

#### Summary

- Pharmacotherapies such as MM & buprenorphine can suppress the use of opiates, but the effects on crime are not commensurate
- Strong potential for Vivitrol<sup>®</sup> and depot formulations of buprenorphine (Probuphine <sup>®</sup> --which can last up to 6 months)
- BTM may serve to improve long-term adherence to depot pharmacotherapies and psychosocial treatment.

