

# **The Role of Public Health in Supporting the Paths to Recovery**

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Substance Abuse and Mental Health Services Administration

Yakima, Washington

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# Today's Agenda

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- Addiction as a Public Health Problem
- National/State Trends in Substance Use
- Science of Addiction
- Principles of Addiction Treatment
- Toward a Recovery Paradigm

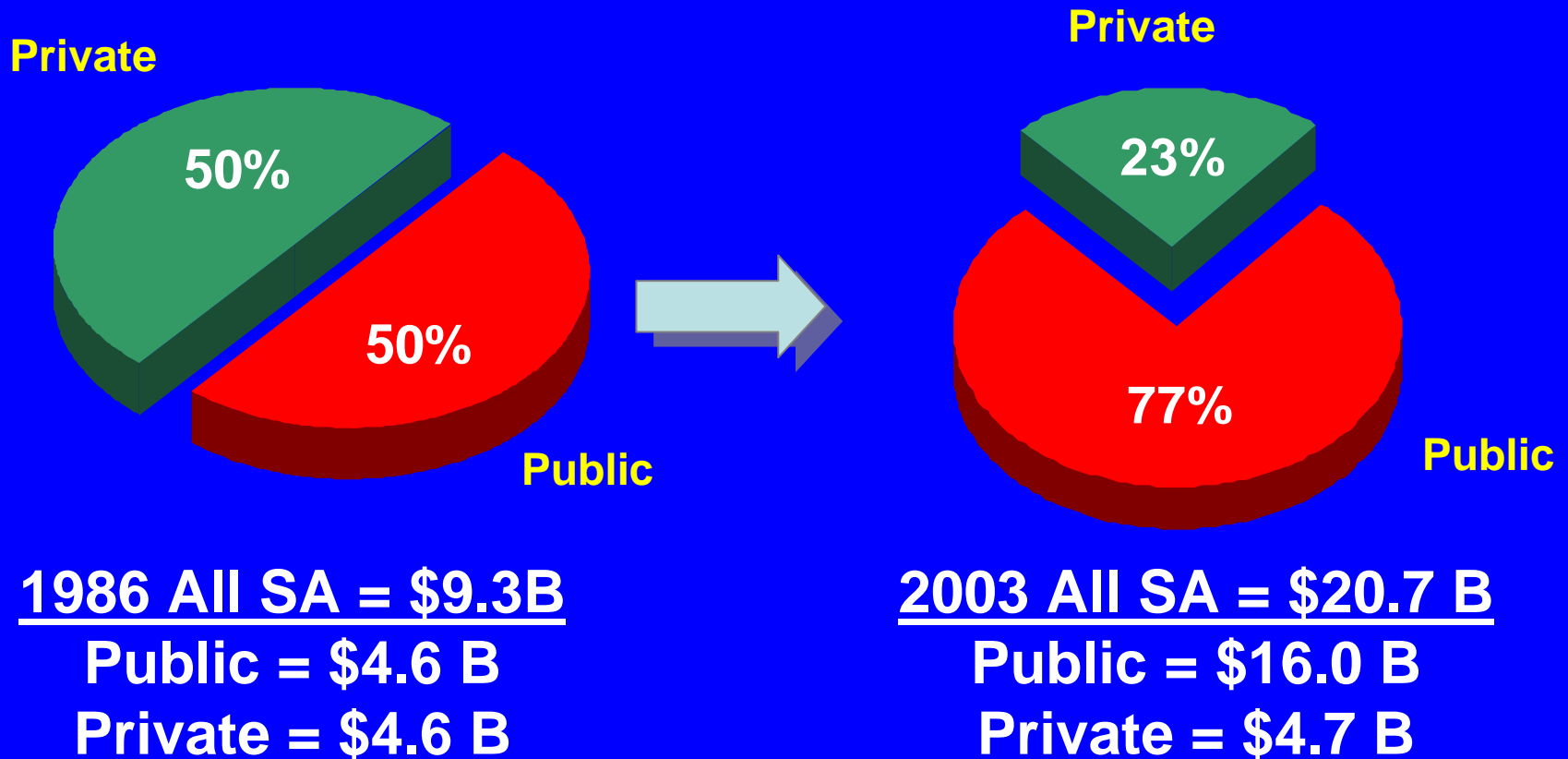
# Addiction as a Public Health Problem

# Economic Impact of Alcohol and Drugs

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- The economic cost to society from alcohol and drug abuse was an estimated \$246 billion in 1995.
- Costs incurred on:
  - Health Care
  - Premature Death
  - Impaired Productivity
  - Motor Vehicle Crashes
  - Crime
  - Social Welfare

# Greater Burden on Public Sector



# Greater Burden on General Medical Care System

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- Medical conditions were found to be more common among substance abuse patients compared to non-substance abuse patients (Mertens et al., 2003).
- Substance dependent persons without primary medical care have a substantial burden of medical illness compared to age/gender matched US population controls (De Alba et al., 2004).

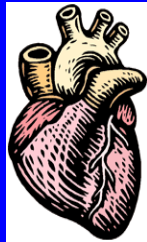
# Health Consequences of Substance Use



HIV/AIDS



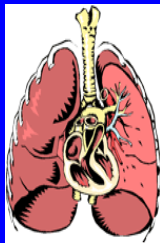
Liver



Cardiovascular



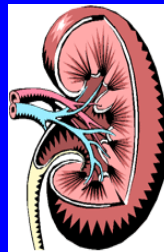
Musculoskeletal



Respiratory



Gastro-Intestinal



Kidney



Prenatal

# Health Consequences of Substance Abuse

	HIV	CV	Resp	GI	Musc	Kidney	Liver	Cancer	Prenatal
Alcohol	X	X		X		X	X		X
Nicotine		X	X	X				X	X
MJ		X	X						
Heroin	X								X
Cocaine	X	X	X	X					X
Steroids	X	X			X		X	X	
Meth	X	X			X				X
Inhalants		X			X	X	X		X
MDMA		X		X	X	X			X
Rx Drugs		X	X	X					X

# Drugs and HIV: Dangerous Liaisons

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- Approximately 13% of the reported new AIDS cases were related to injection drug use (2006).
- Cocaine may foster development of HIV-associated dementia by increasing viral expression in the brain (Gekker, et al., 2004).
- Methamphetamine and HIV infection in combination are associated with deleterious cognitive effects (Rippeth, et al., 2004).

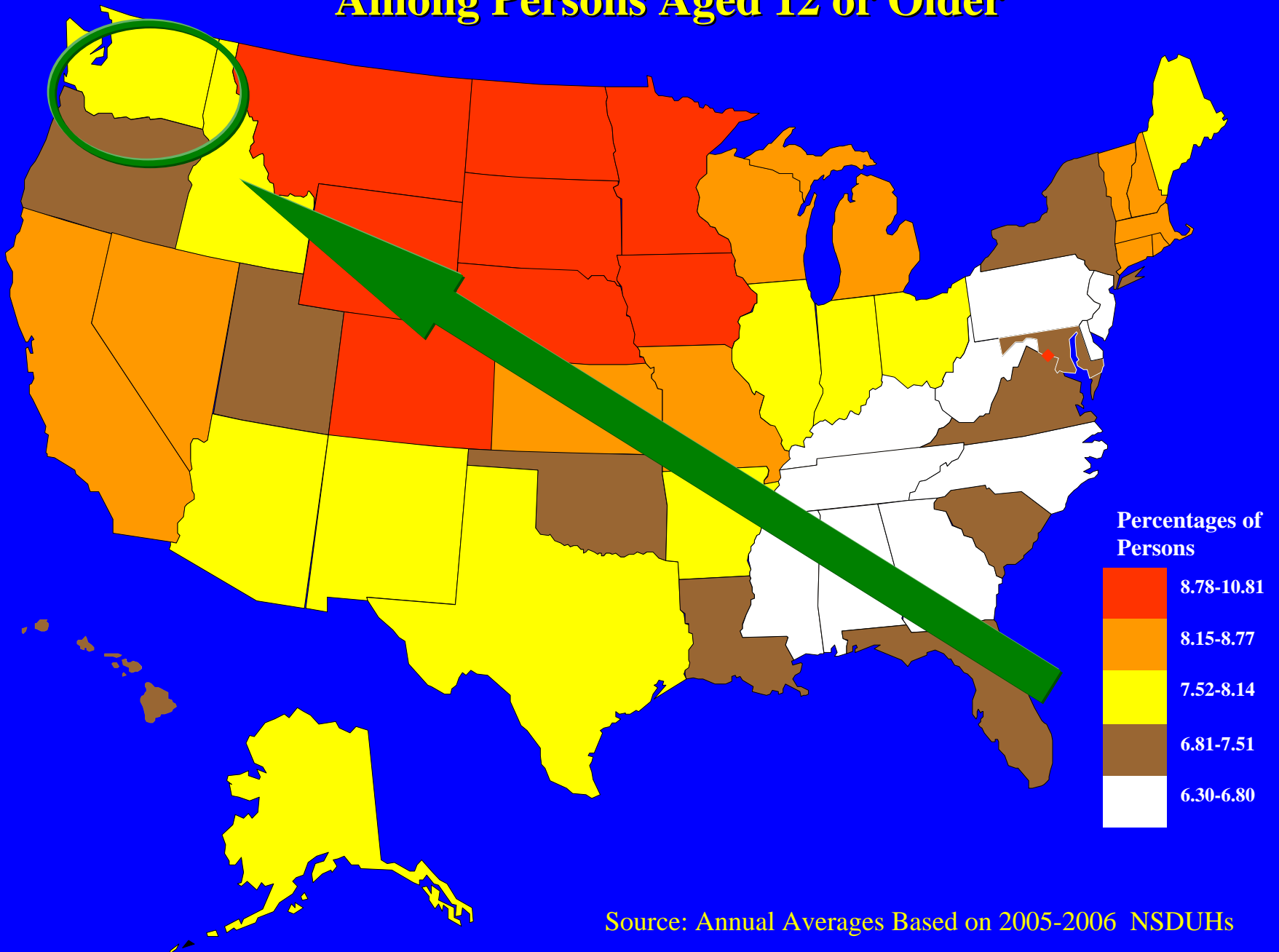
# Substance Use and Prenatal Effects

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- Prenatal marijuana exposure is associated with lower academic achievement at age 10 (Goldschmidt et al., 2004).
- 4 year old children exposed to cocaine in utero scored significantly lower on intelligence tests, although childrearing environments may be able to counter these deficits (Singer et al., 2004).

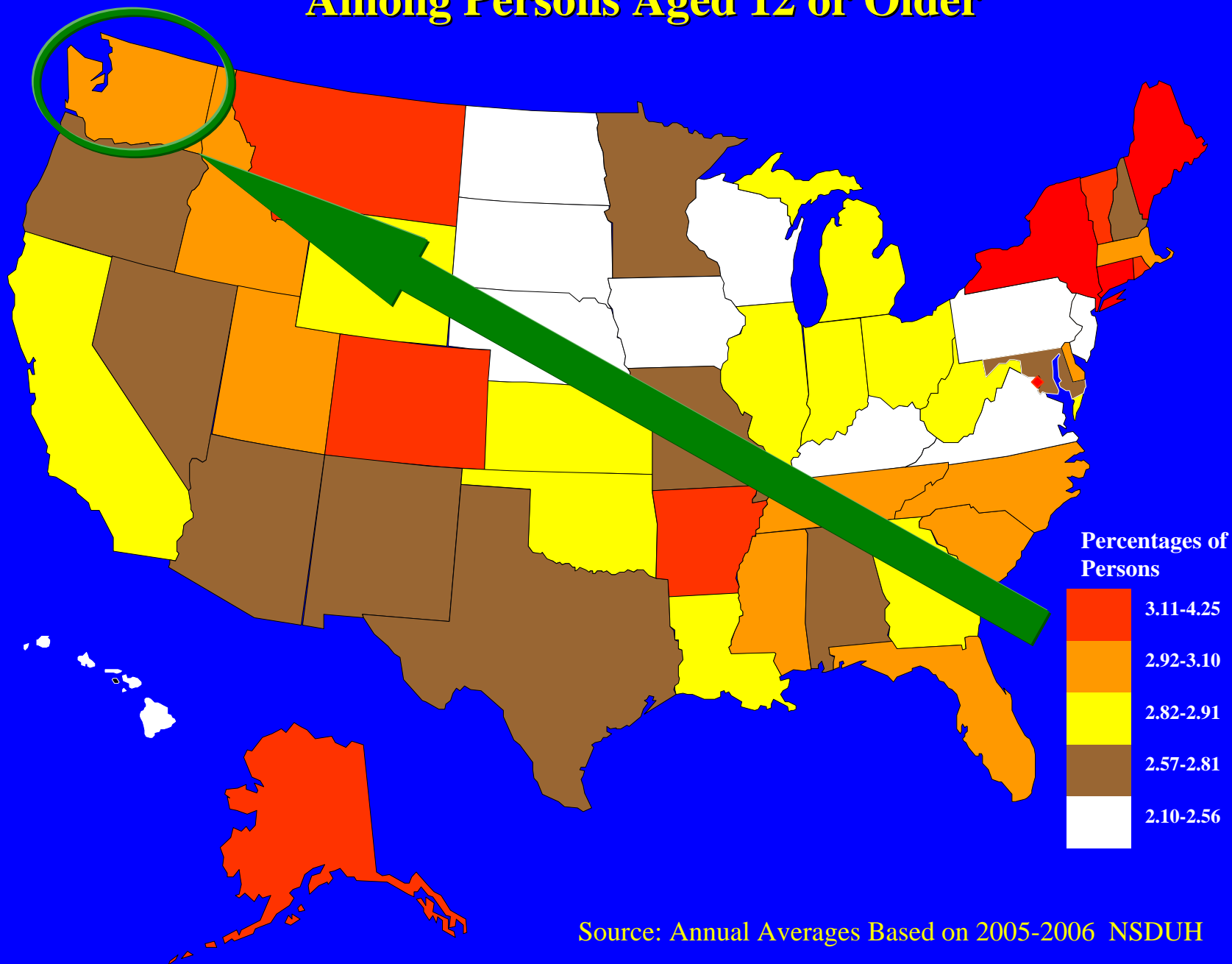
# National/Local Trends in Substance Use

# Alcohol Dependence or Abuse in Past Year Among Persons Aged 12 or Older

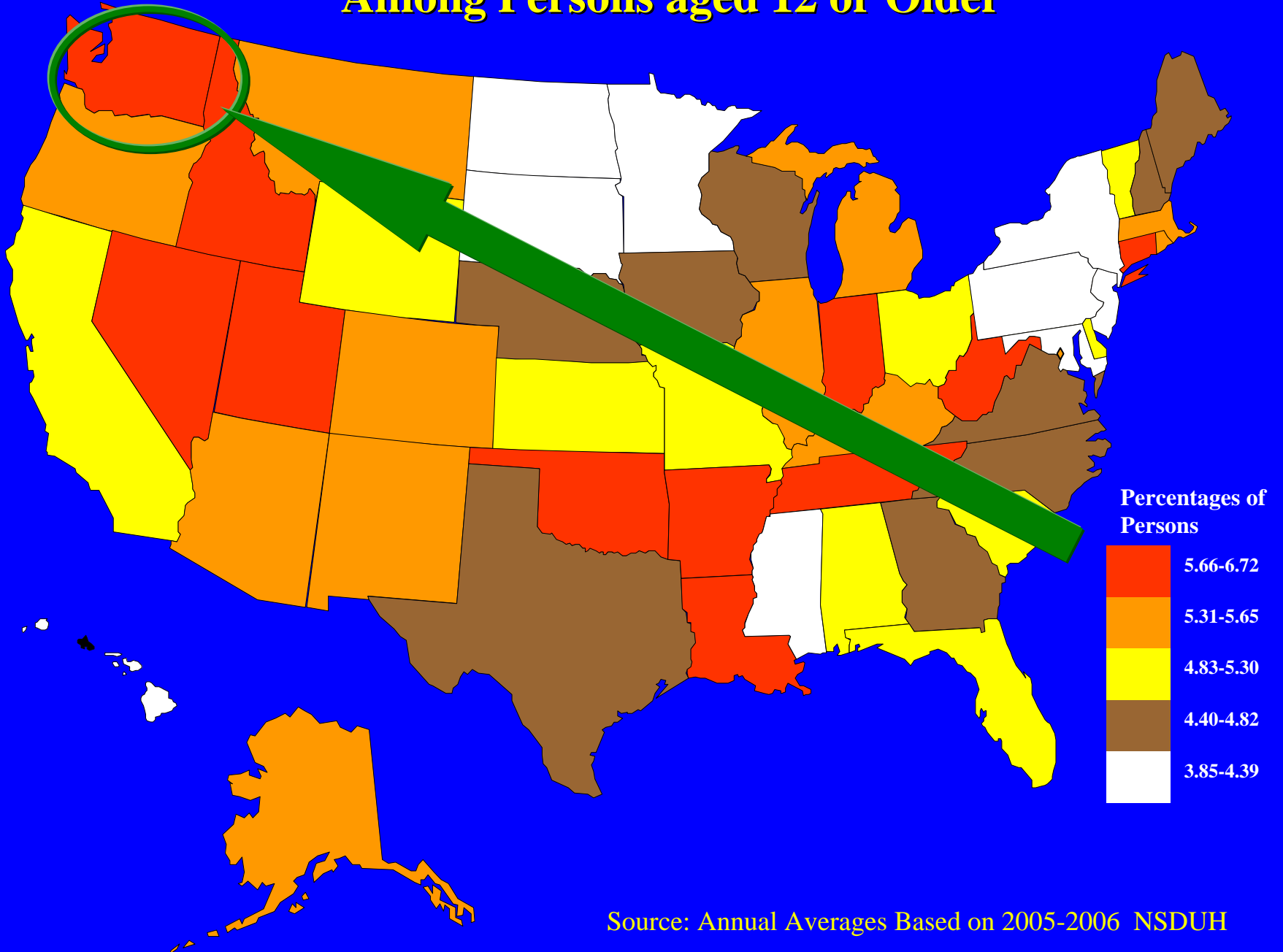


Source: Annual Averages Based on 2005-2006 NSDUHs

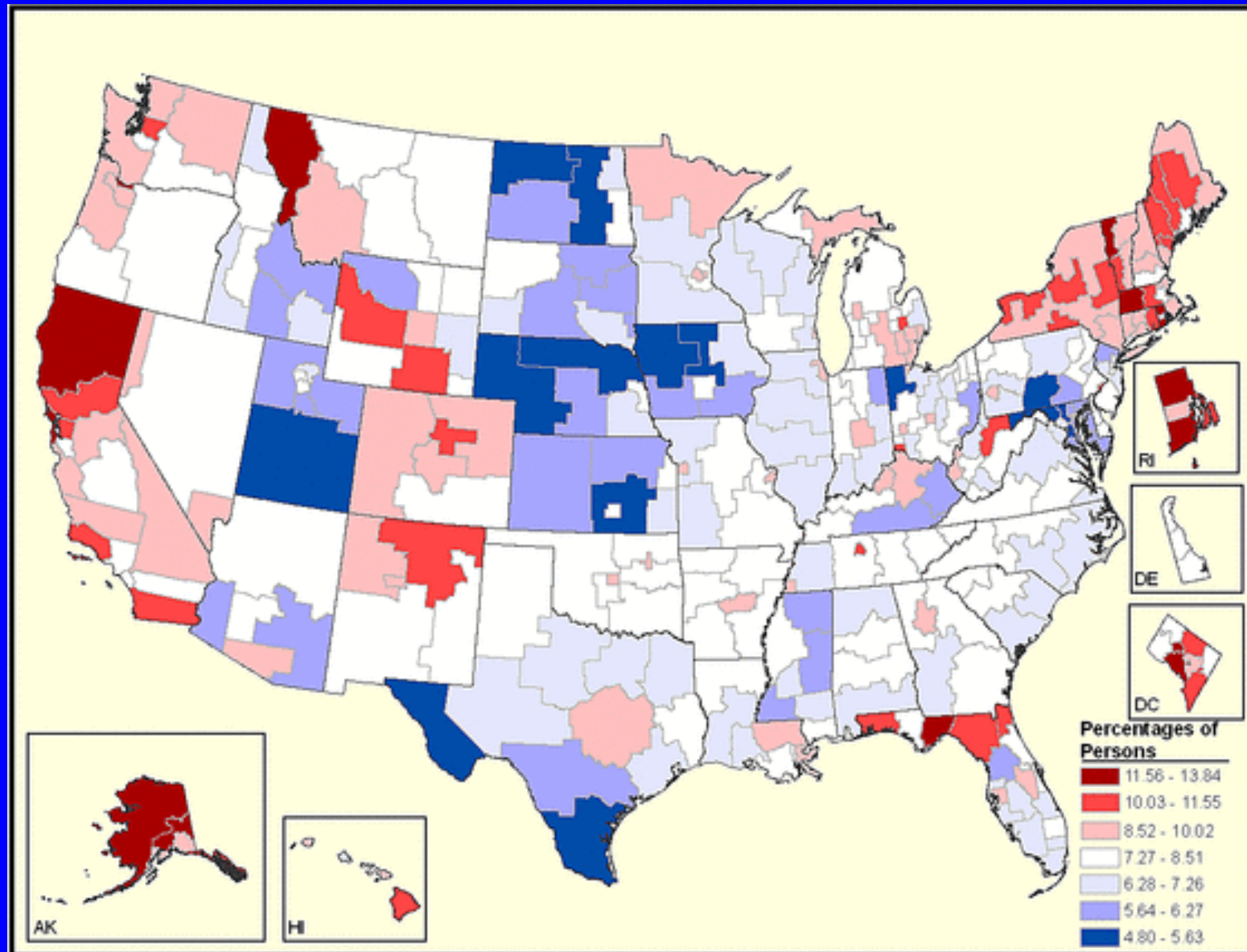
# Illicit Drug Dependence or Abuse in Past Year Among Persons Aged 12 or Older



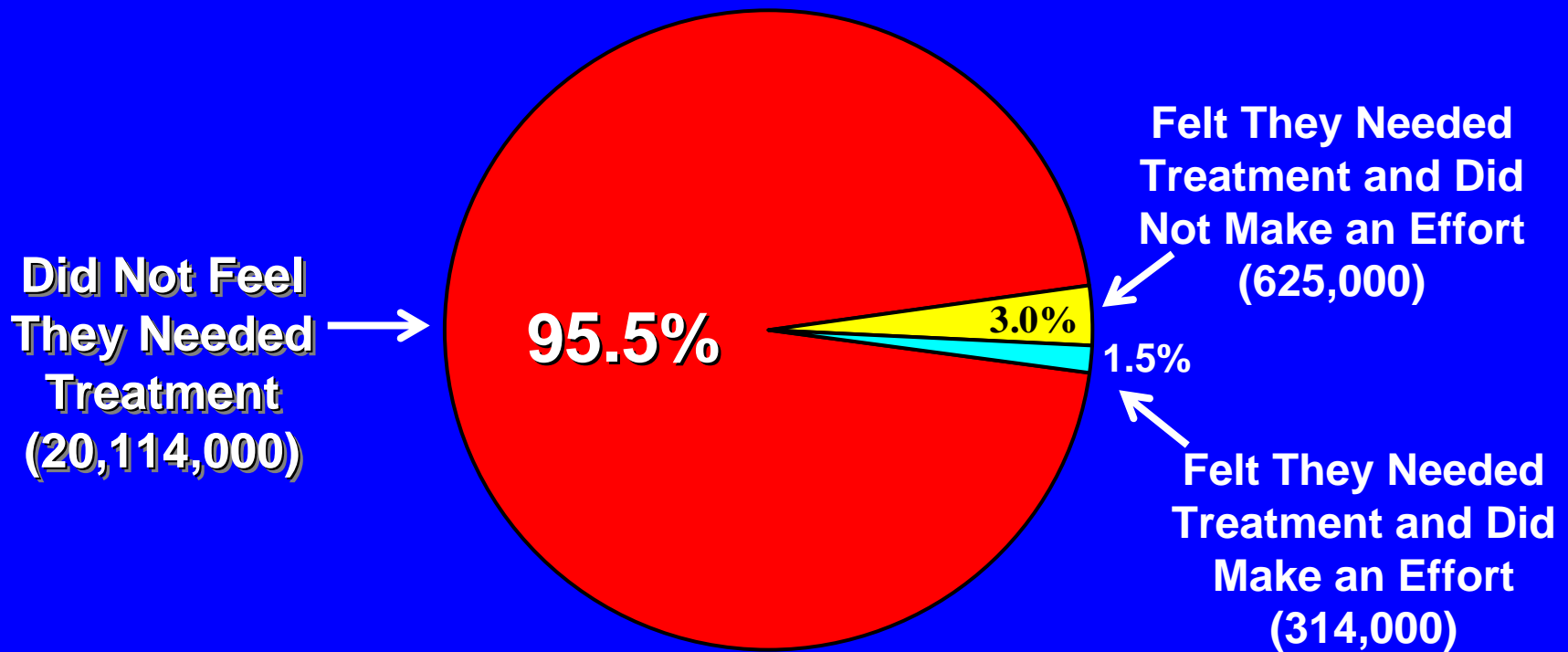
# Non-Medical use of Pain Relievers in Past Year Among Persons aged 12 or Older



# Illicit Drug Use by Substate Regions: Washington



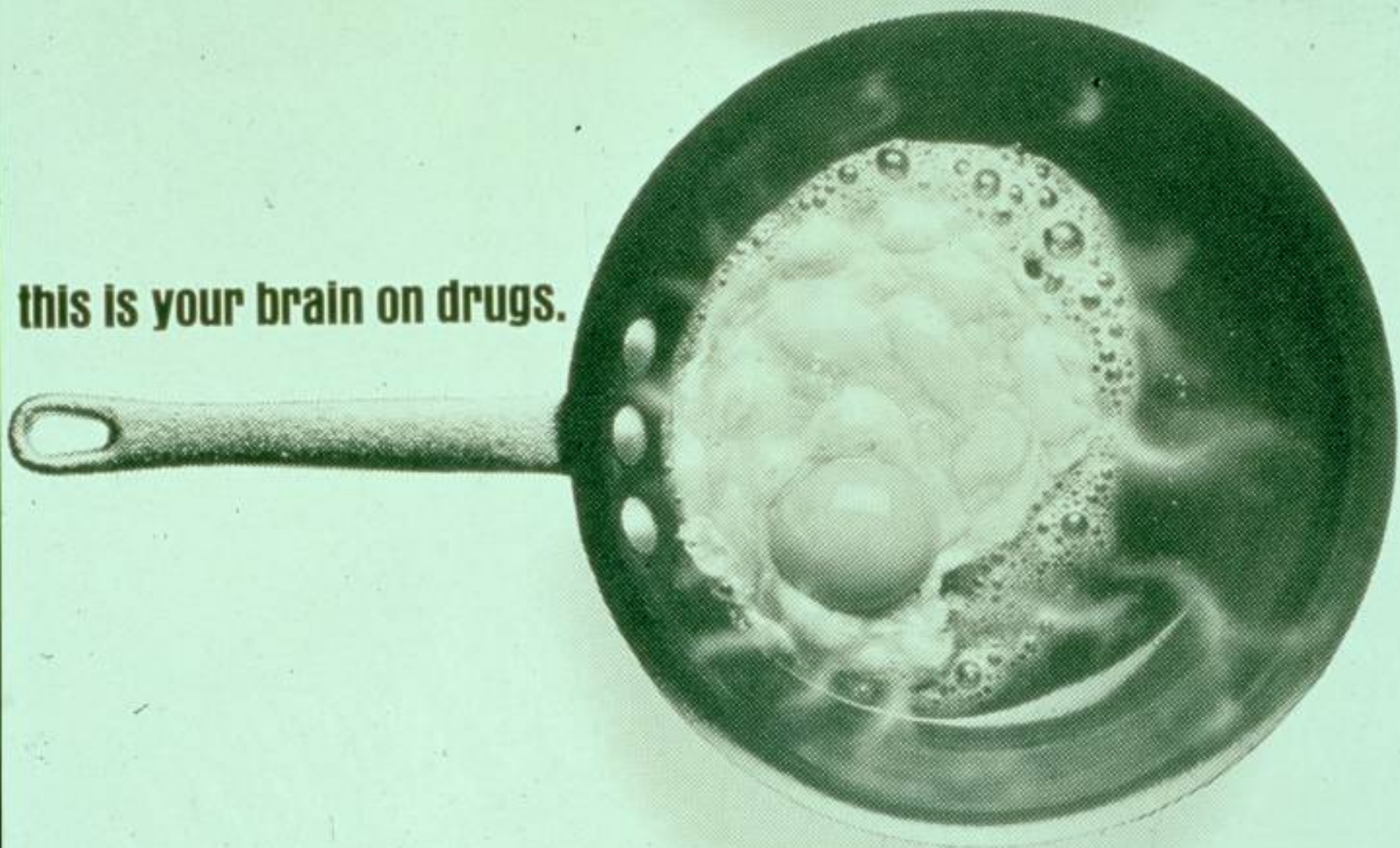
# The National Treatment Gap



21.1 Million Needing But Not Receiving Treatment for Illicit Drug or Alcohol Use

# The Science of Addiction

**this is your brain on drugs.**

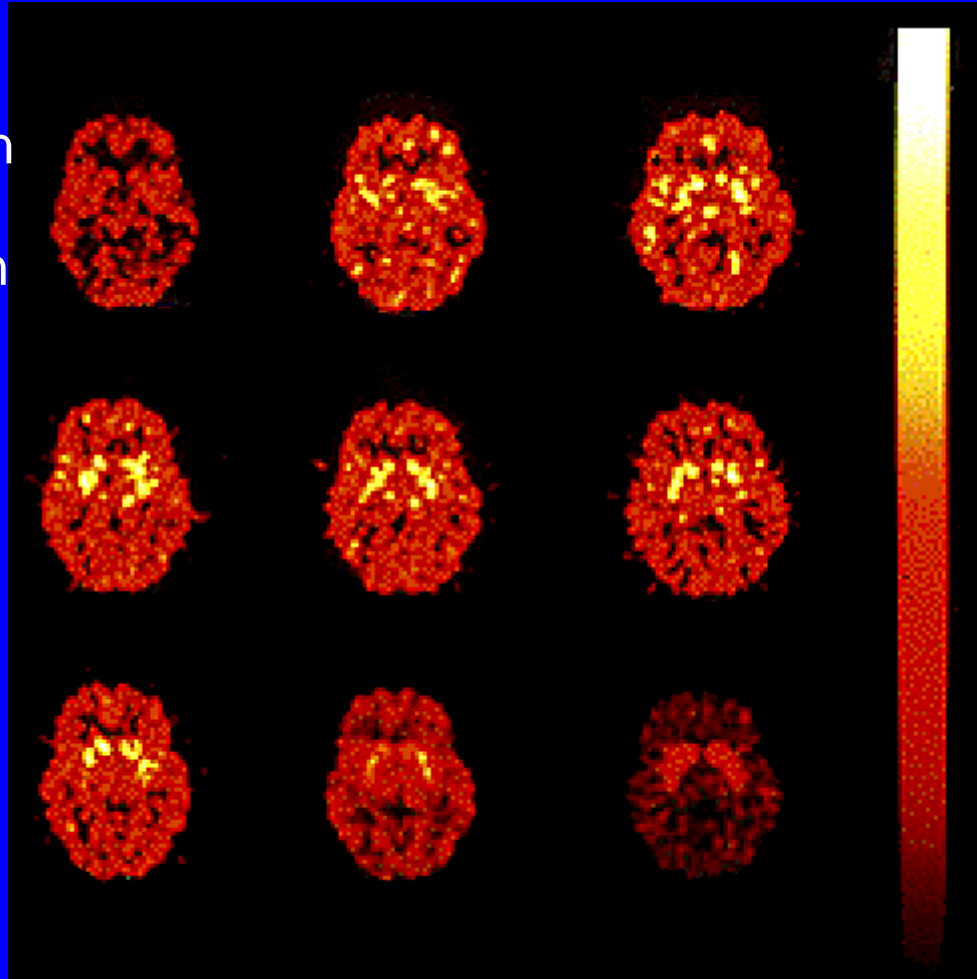


# The Brain on Drugs

Front of brain

Back of brain

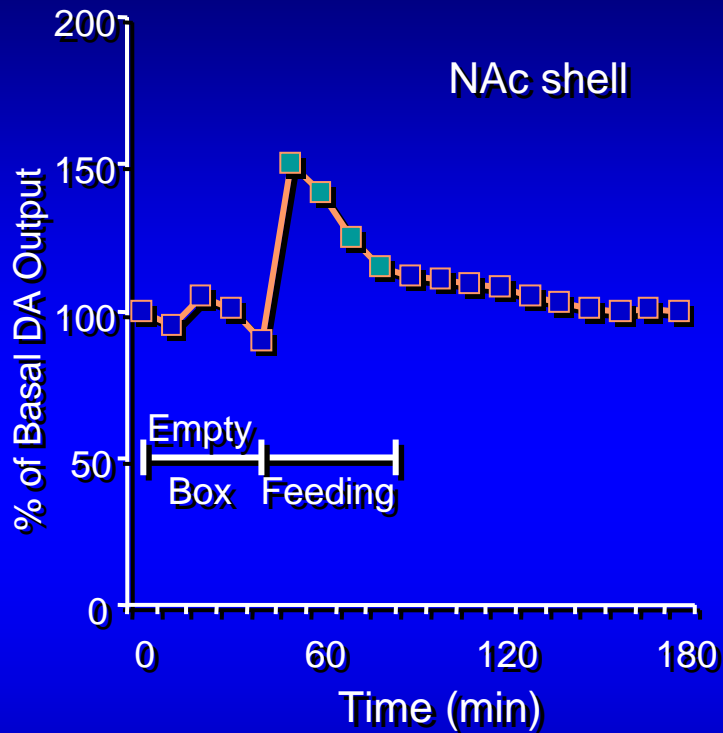
**YELLOW** shows  
places in brain where  
cocaine goes  
(Striatum)



Despite Their Many Differences,  
Virtually All Abused Substances  
Enhance the Dopamine Pleasure  
Pathway

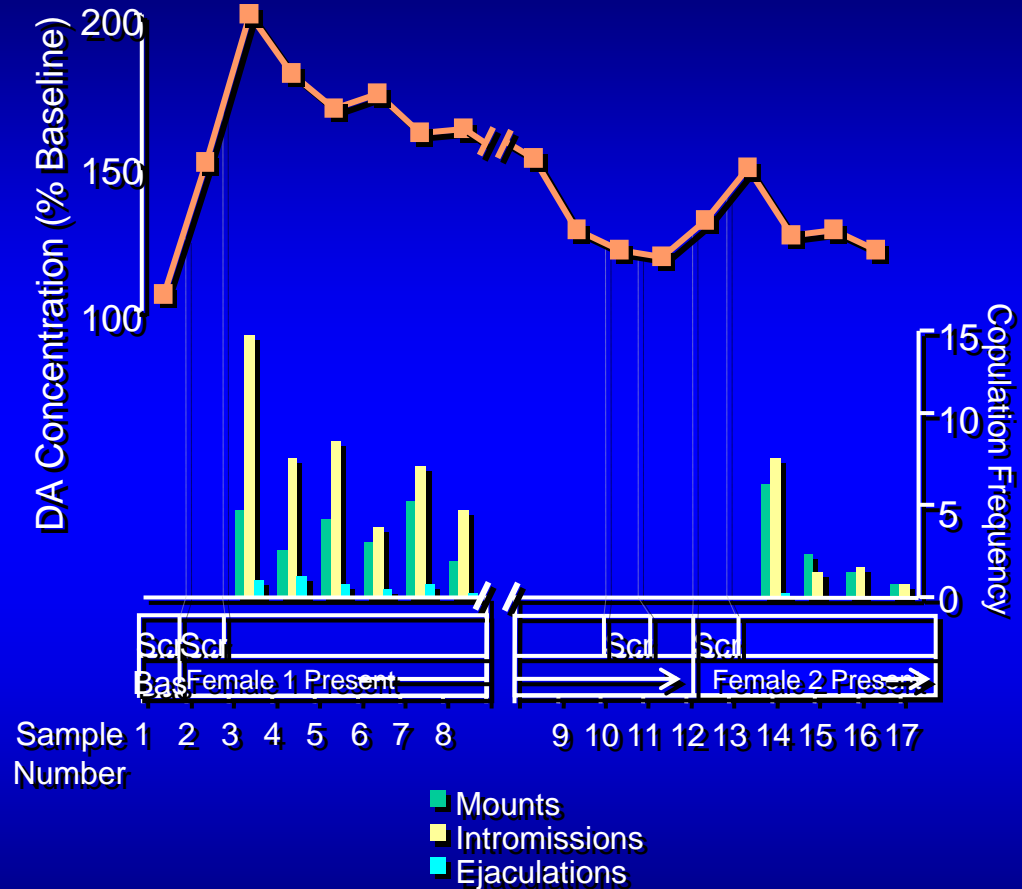
# Natural Rewards Elevate Dopamine Levels

## FOOD



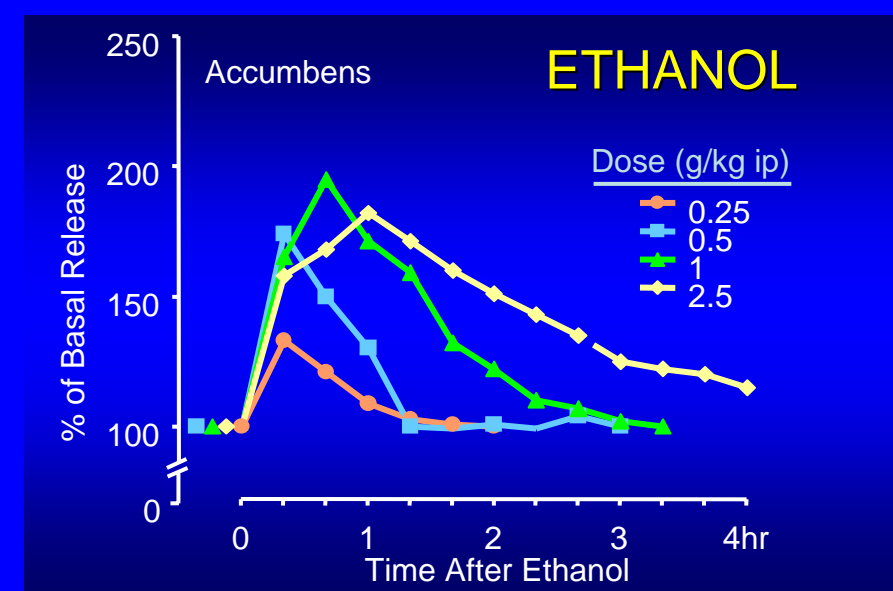
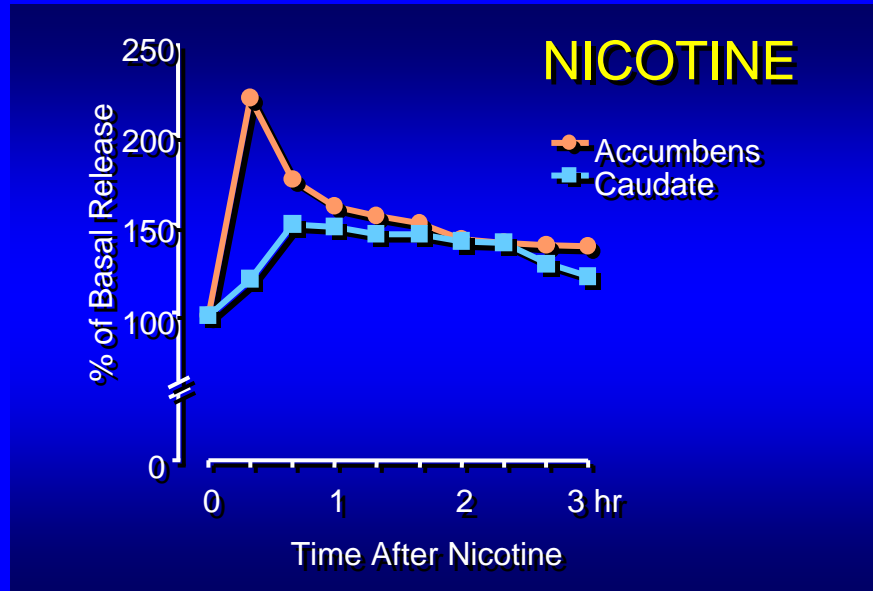
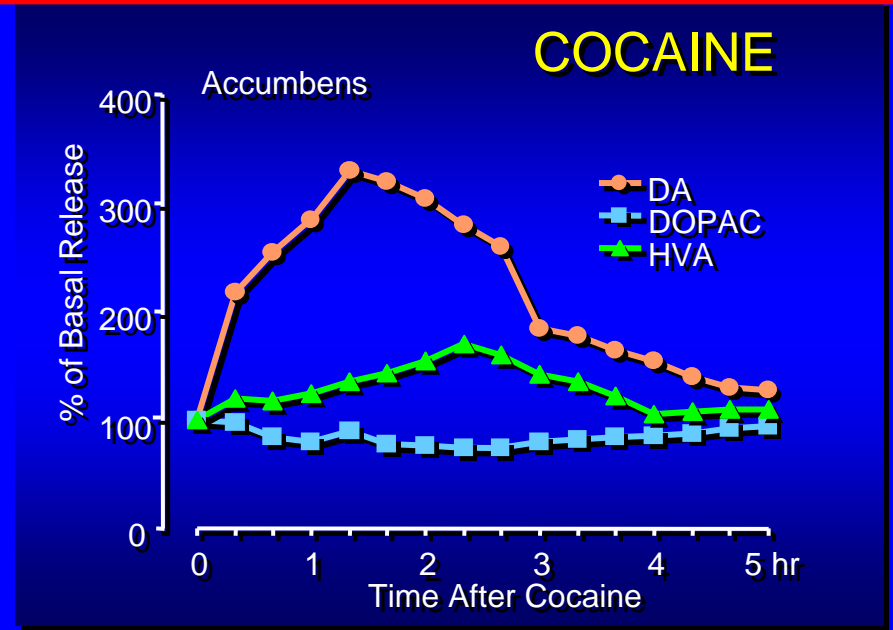
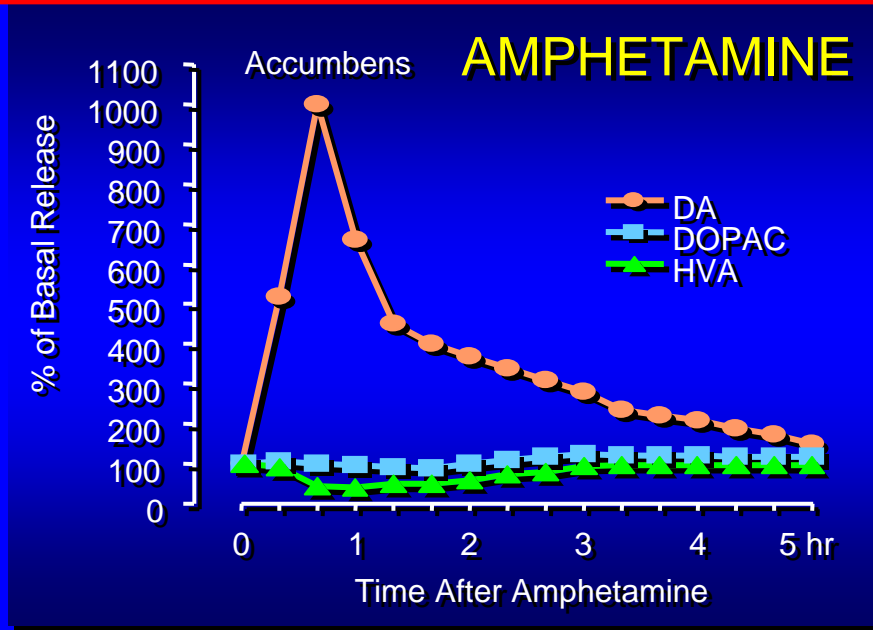
Source: Di Chiara et al.

## SEX



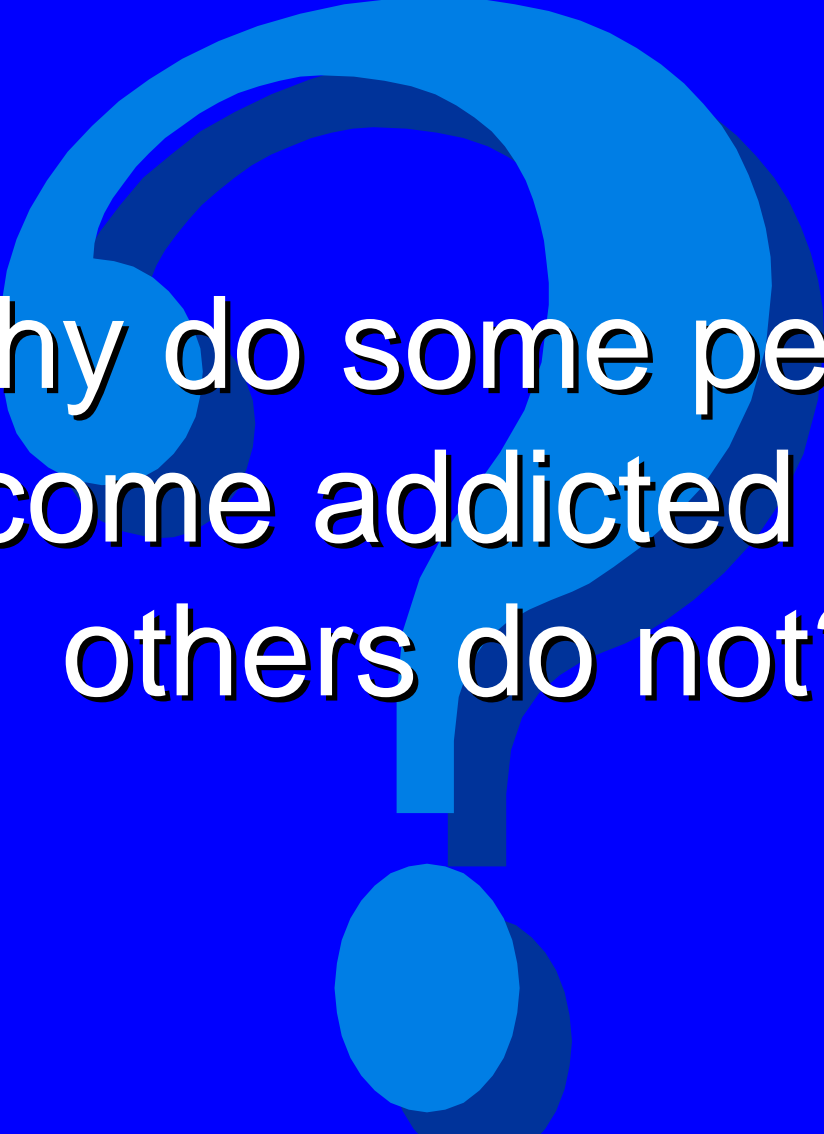
Source: Fiorino and Phillips

# Effects of Drugs on Dopamine Levels



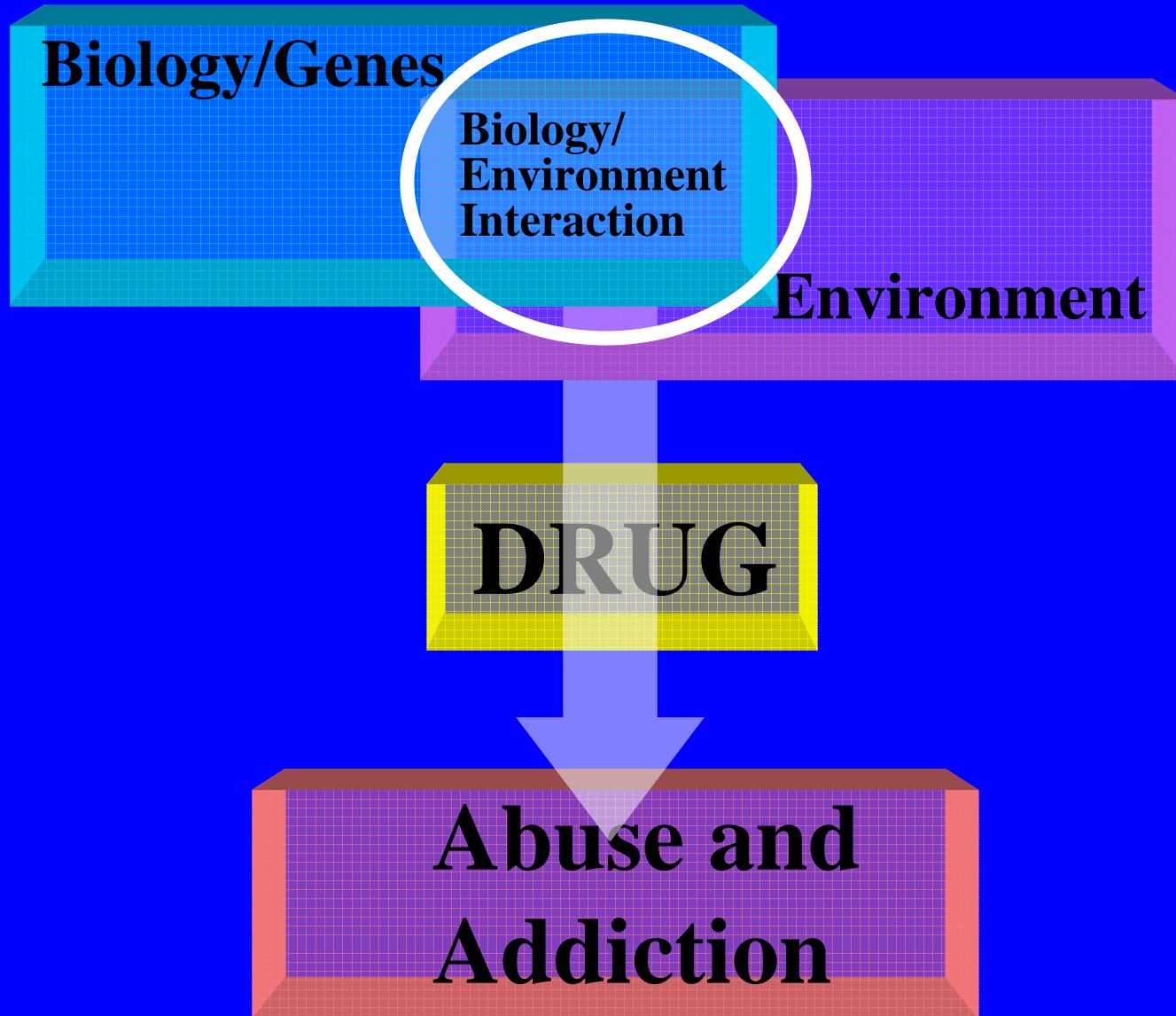
# Vulnerability

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Why do some people  
become addicted while  
others do not?

# Biological and Environmental Interaction



**Drug Abuse**



**Risk and  
Protective Factors**

Drug Abuse

Drug/Alcohol  
Related Traffic  
Accidents

Delinquency

Sexually  
Transmitted  
Diseases  
(Including  
HIV/AIDS)

Risk and  
Protective Factors

Academic  
Failure and  
Dropping  
Out of School

Suicidal  
Behavior

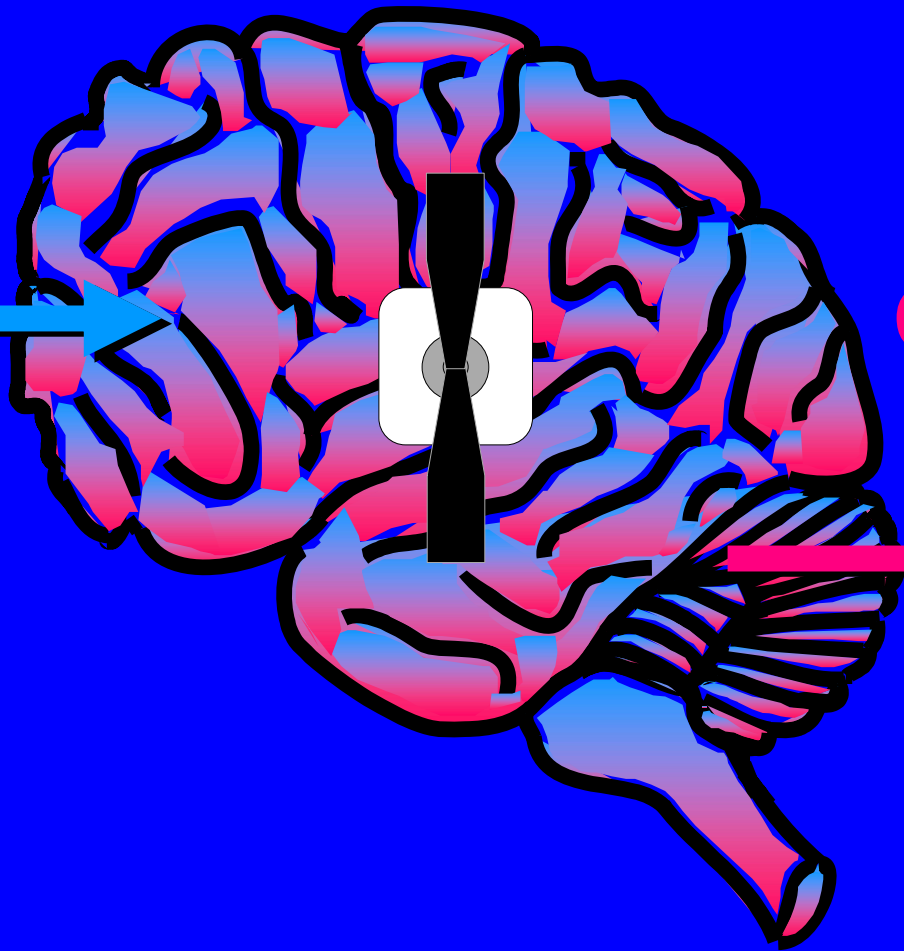
Juvenile  
Depression

Unwanted  
Pregnancies

Running Away  
From Home

*What Happens After Persistent  
or Repeated Drug Use?*

Voluntary  
Drug  
Use



Compulsive  
Drug Use  
(Addiction)

# **Principles of Addiction Treatment**

# Treatment Outcomes

Drug Abuse Treatment Outcome Studies

## *DATOS*

1991-93

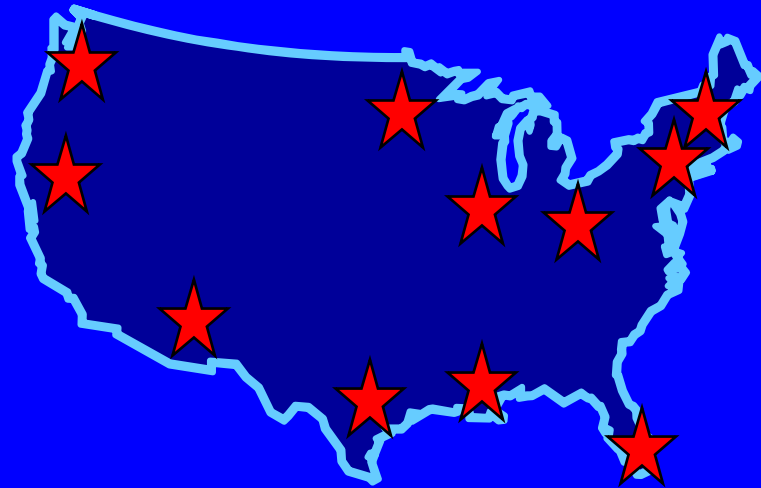
11 Cities

96 Programs

~10,000 Patients

All treatment types

Follow-up: 1 & 5 Yrs



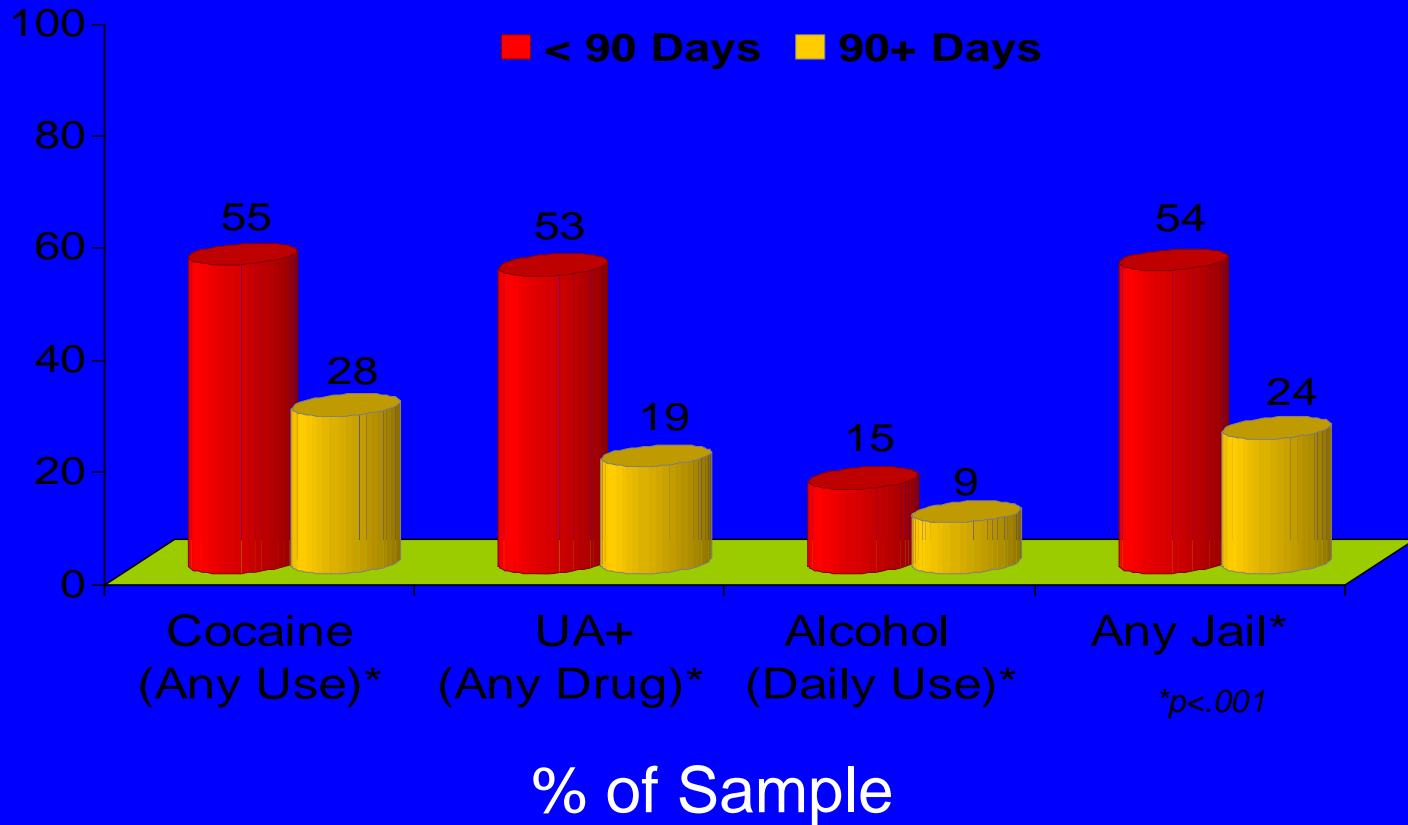
# Is Treatment Effective?

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- Reduces drug use by 40-60%
- Reduces crime by 40-60%
- Increases employment prospects by 40%

**What “Matters”?**

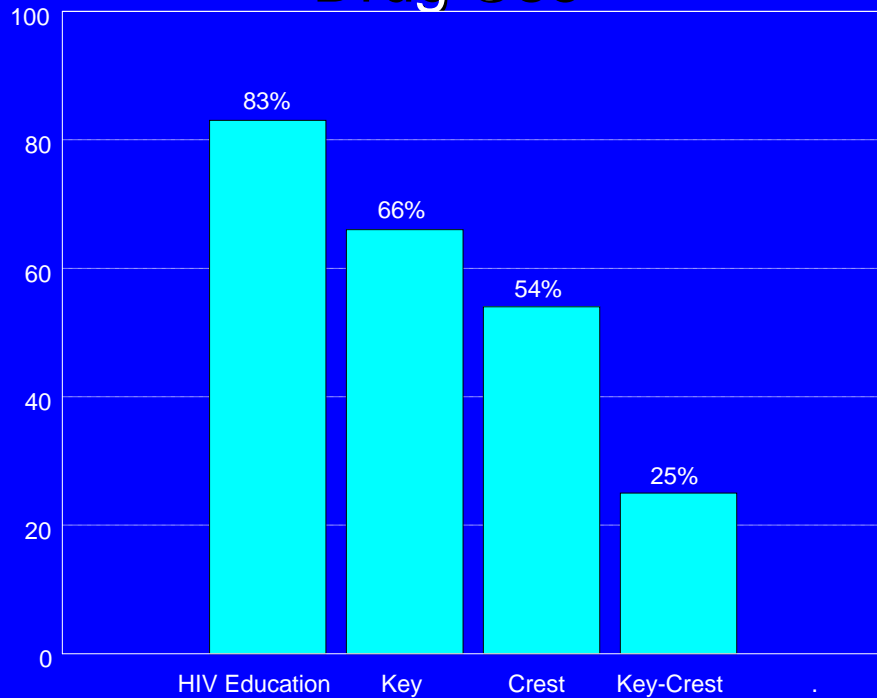
# Length of Stay Matters



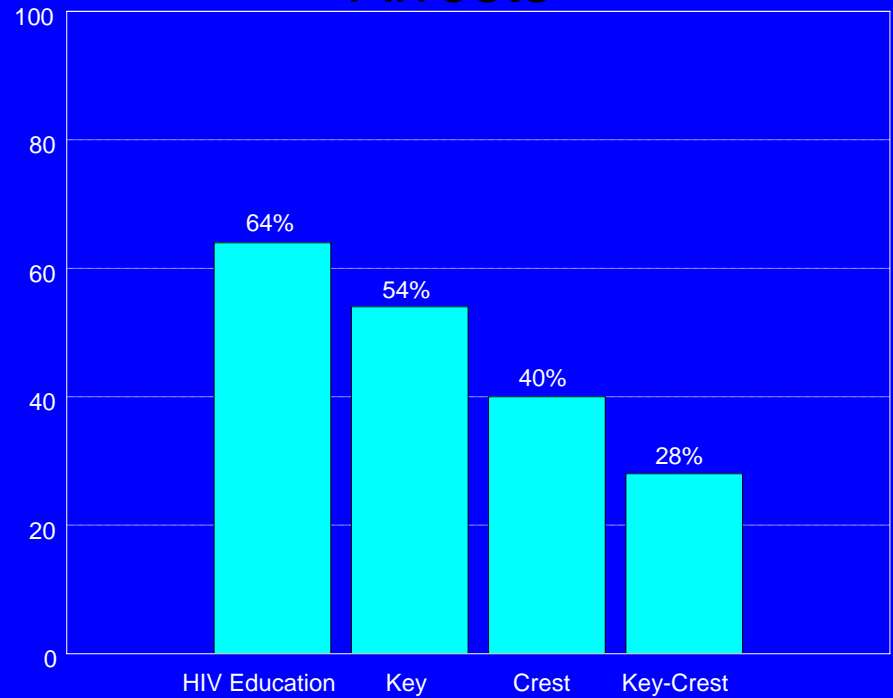
# Amount of Services Matters

(18 month follow-up)

## Drug Use\*



## Arrests\*\*



HIV Education  
Key  
Crest  
Key-Crest

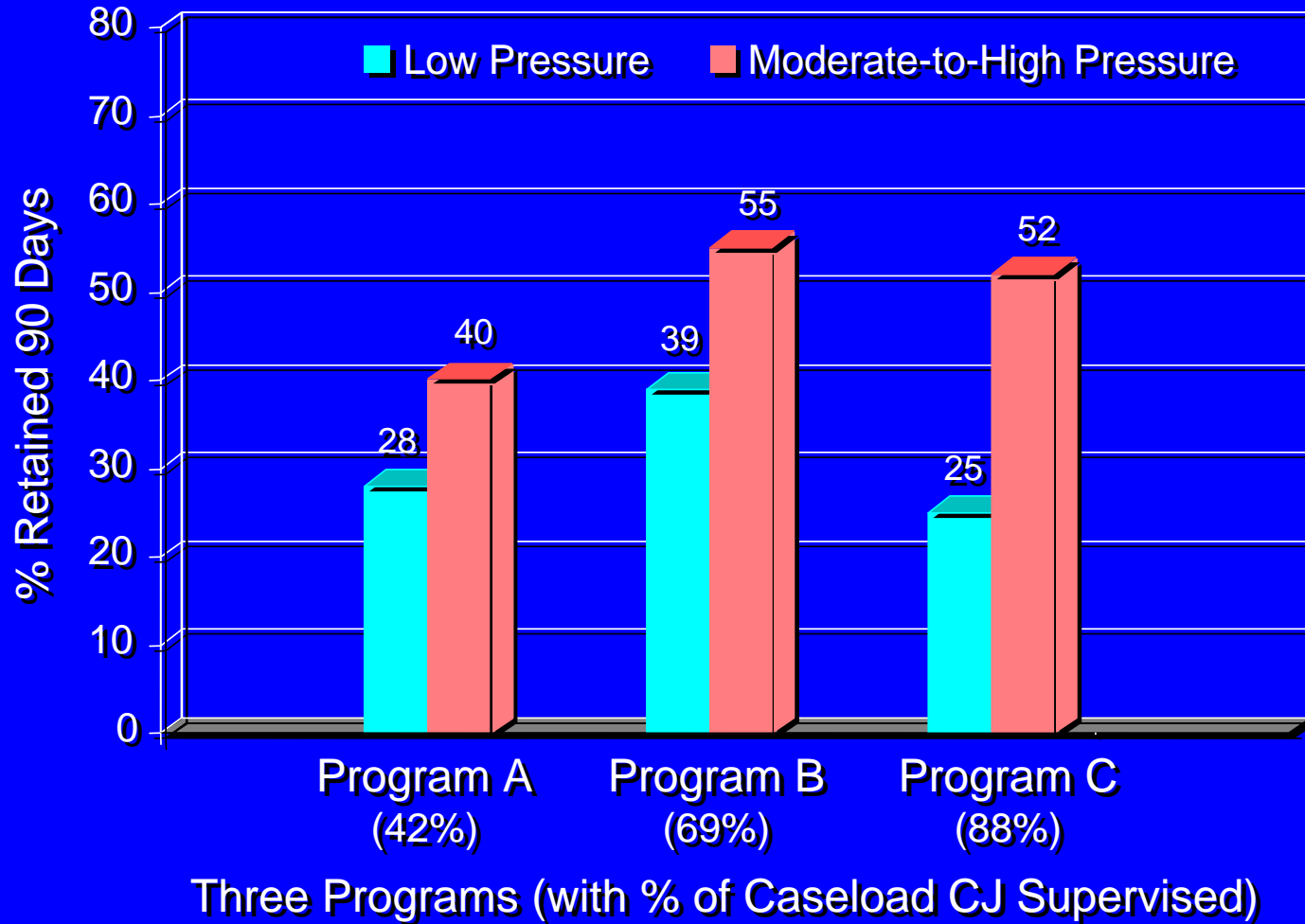
-- no TC  
-- in-prison TC only  
-- work release TC only  
-- both TCs

\* Used drugs one or more times during the last 18 months

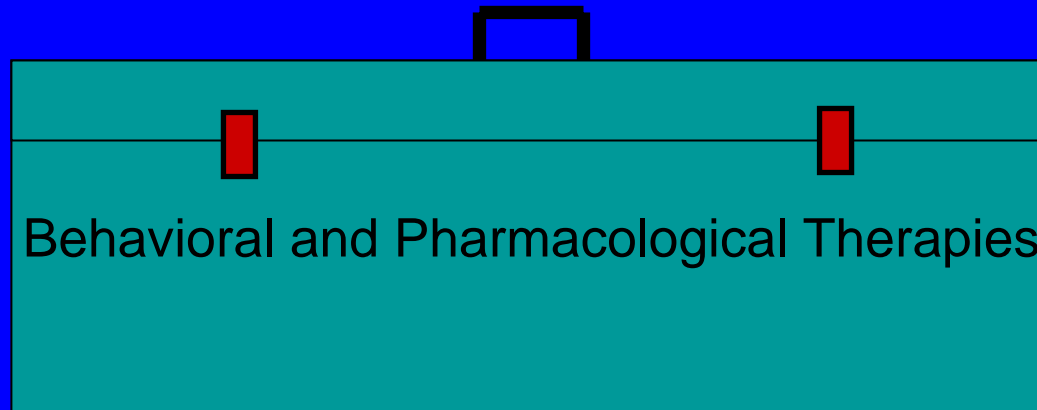
\*\* One or more new arrests and/or probation violations during the last 18 months

Source: Inciardi, J.A. (1995) Therapeutic community: An effective model for corrections-based drug abuse treatment. In K.C. Hass and G.P. Albert (eds.), *The Dilemmas of Punishment* (406-417), Prospect Heights, IL: Waveland Press.

# Legal “Pressure” Matters



# We Have A Variety Of Effective Treatment Options In The Clinical Toolbox



# Evidence-Based Behavioral Treatments

- Behavioral Treatments for MJ Abuse
- Behavioral Treatments for Smoking Cessation
- Cognitive-Behavioral Treatment\*
- Combined Pharmacotherapies and Behavioral Therapies
- Complementary and Alternative Treatments
- Multisystemic Therapy
- Contingency Management Treatments\*
- Dialectical Behavioral Therapy
- Drug Counseling
- Family Treatments
- Group Behavior Therapy
- HIV Risk Reduction
- Motivational Interviewing/Enhancement\*
- Seeking Safety (PTSD)
- Work Therapy

# **Drug Courts: An Innovative Approach**

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- Reduced re-arrest rates of up to 14% compared to non-participants (Guydish, et al, 2001).

# Pharmacotherapy

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## Alcohol:

- Naltrexone
- Disulfiram (antabuse)
- Acamprosate

## Opiates:

- Methadone (agonist)
- Naltrexone (antagonist)
- Clonidine (non-opioid agonist)
- Buprenorphine

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**Using  
NREPP**



**Find  
Interventions**



**NREPP  
News**



Welcome to the National Registry of Evidence-based Programs and Practices (NREPP), a service of the Substance Abuse and Mental Health Services Administration (SAMHSA).

NREPP is a searchable database of interventions for the prevention and treatment of mental and substance use disorders. SAMHSA has developed this resource to help people, agencies, and organizations implement programs and practices in their communities.



A program of the U.S.  
Department of Health and  
Human Services Substance  
Abuse & Mental Health  
Services Administration

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Page last updated 01/03/2008

# **Toward a Recovery Paradigm**

# What Do We Mean by “Recovery”?

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Recovery from alcohol and drug problems is a process of change through which an individual achieves abstinence and improved health, wellness, and quality of life.

# Recovery-Based Service Systems

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Services that attend to long-term recovery shift  
the question from

*“How do we get the client into treatment?”*

to

*“How do we support the process of recovery  
within the person’s environment?”*

# Why a Recovery-Based Approach?

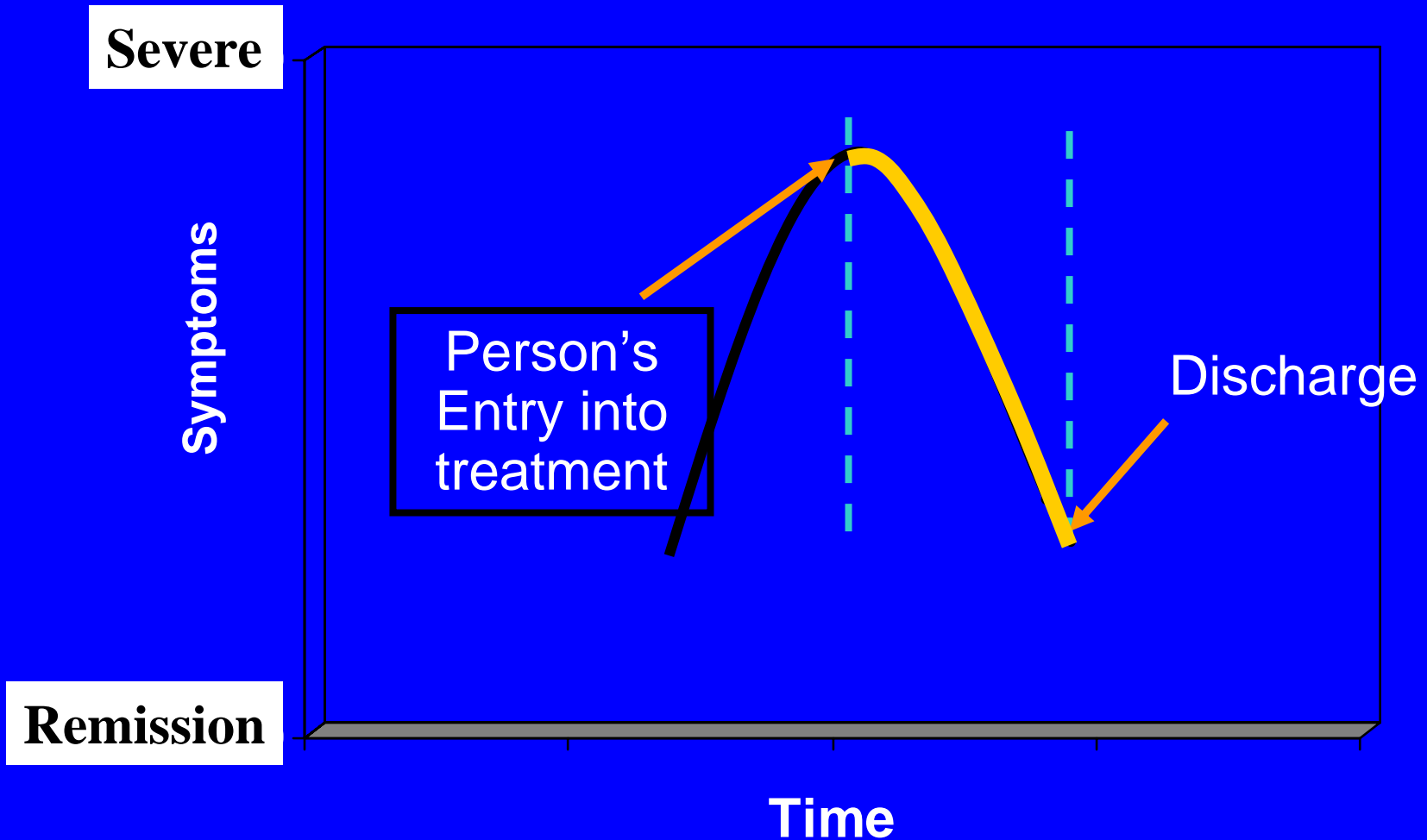
- Most clients undergo 3 to 4 episodes of care before reaching a stable state of abstinence <sup>1</sup>
- Chronic care approaches, including self-management, family supports, and integrated services, improve recovery outcomes <sup>2</sup>
- Integrated and collaborative care has been shown to optimize recovery outcomes and improve cost-effectiveness <sup>3</sup>

<sup>1</sup> Dennis, Scott & Funk, 2003

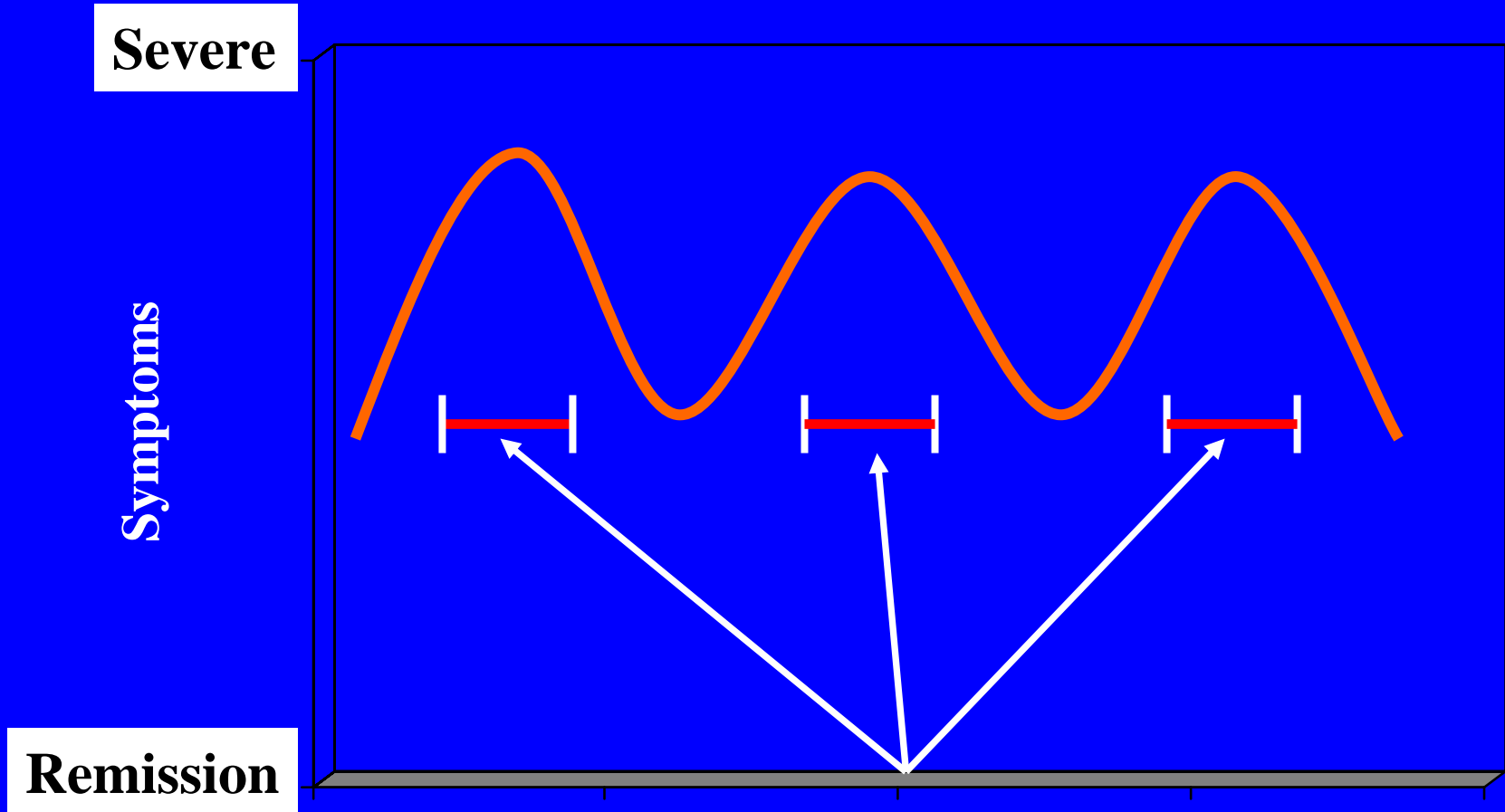
<sup>2</sup> Lorig et al, 2001; Jason, Davis, Ferrari, & Bishop; 2001; Weisner et al, 2001; Friedmann et al, 2001

<sup>3</sup> Smith, Meyers, & Miller, 2001; Humphreys & Moos, 2001)

# A Traditional Course of Treatment for a Substance Use Disorder



# A Traditional Service Response

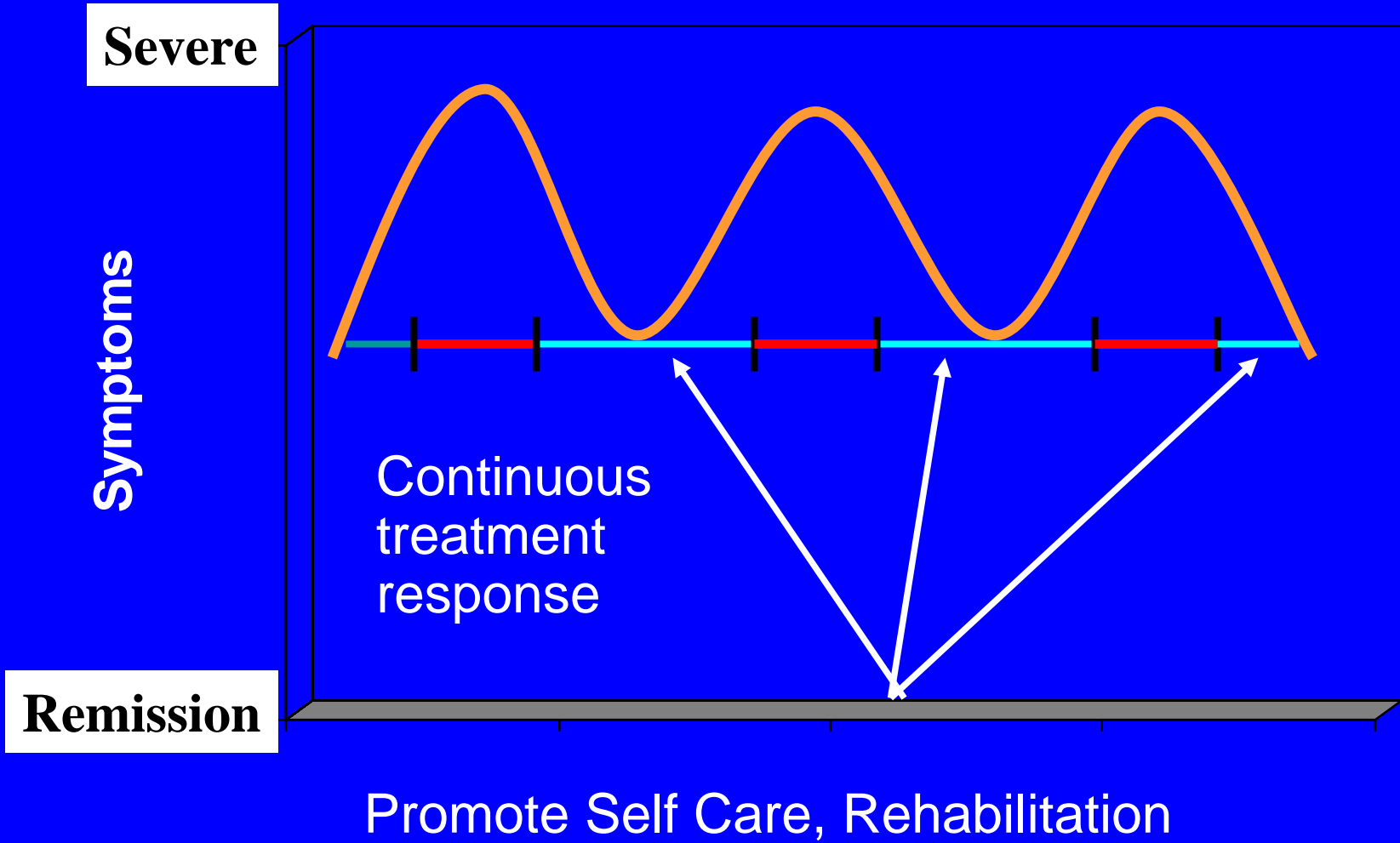


Acute symptoms

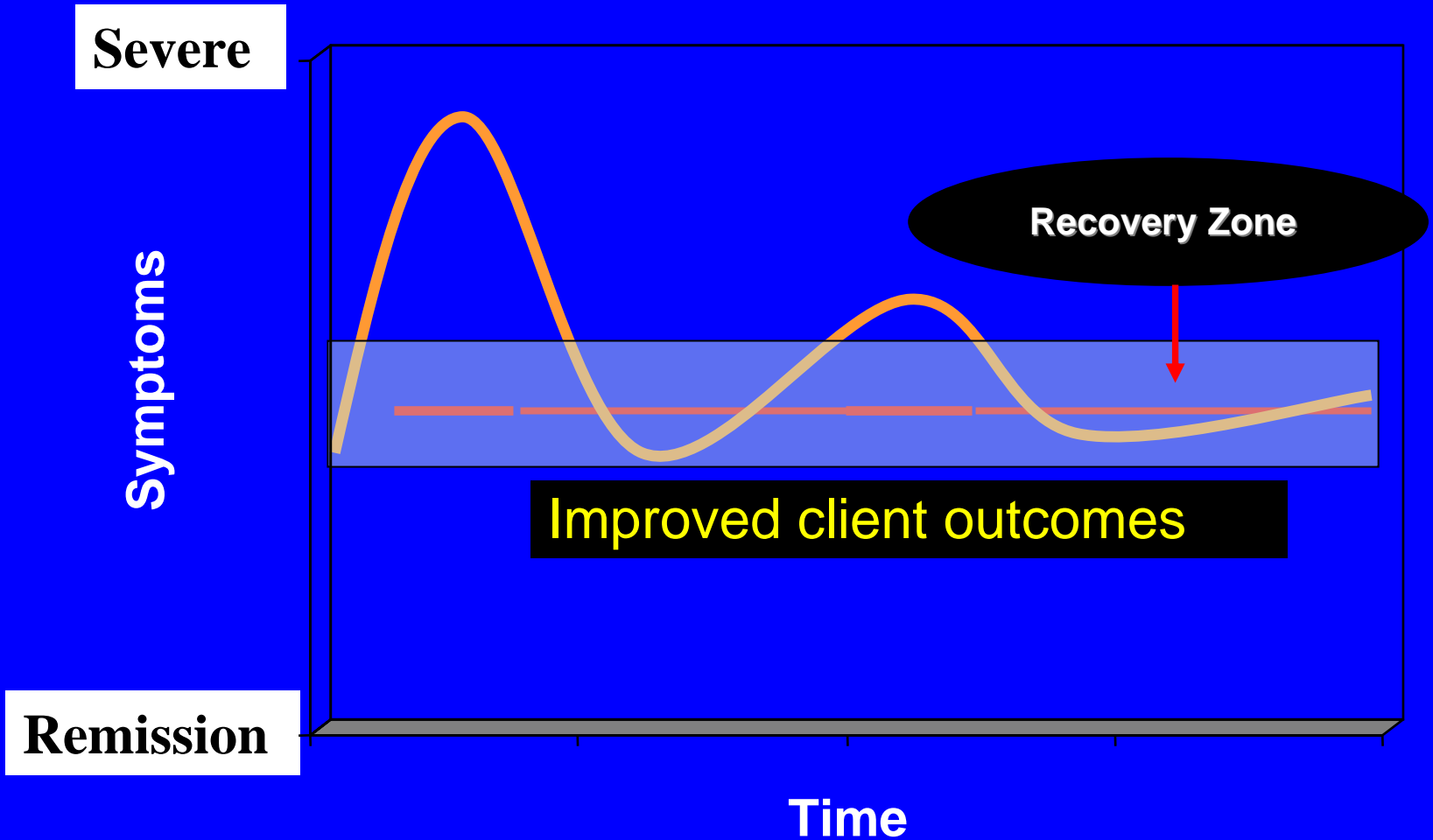
Discontinuous treatment

Crisis management

# A Recovery-Oriented Response

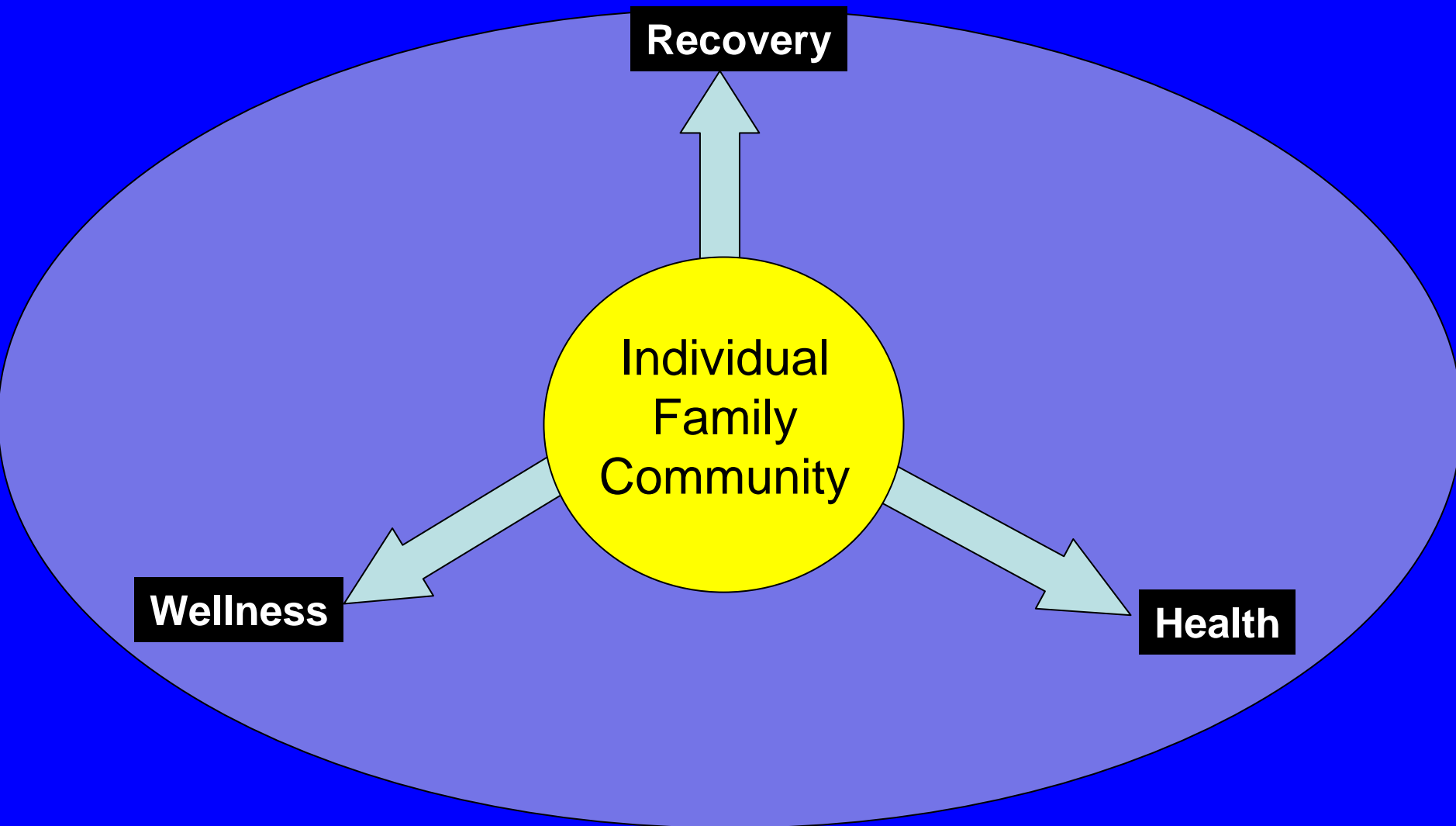


# Helping People Move Into A Recovery Zone

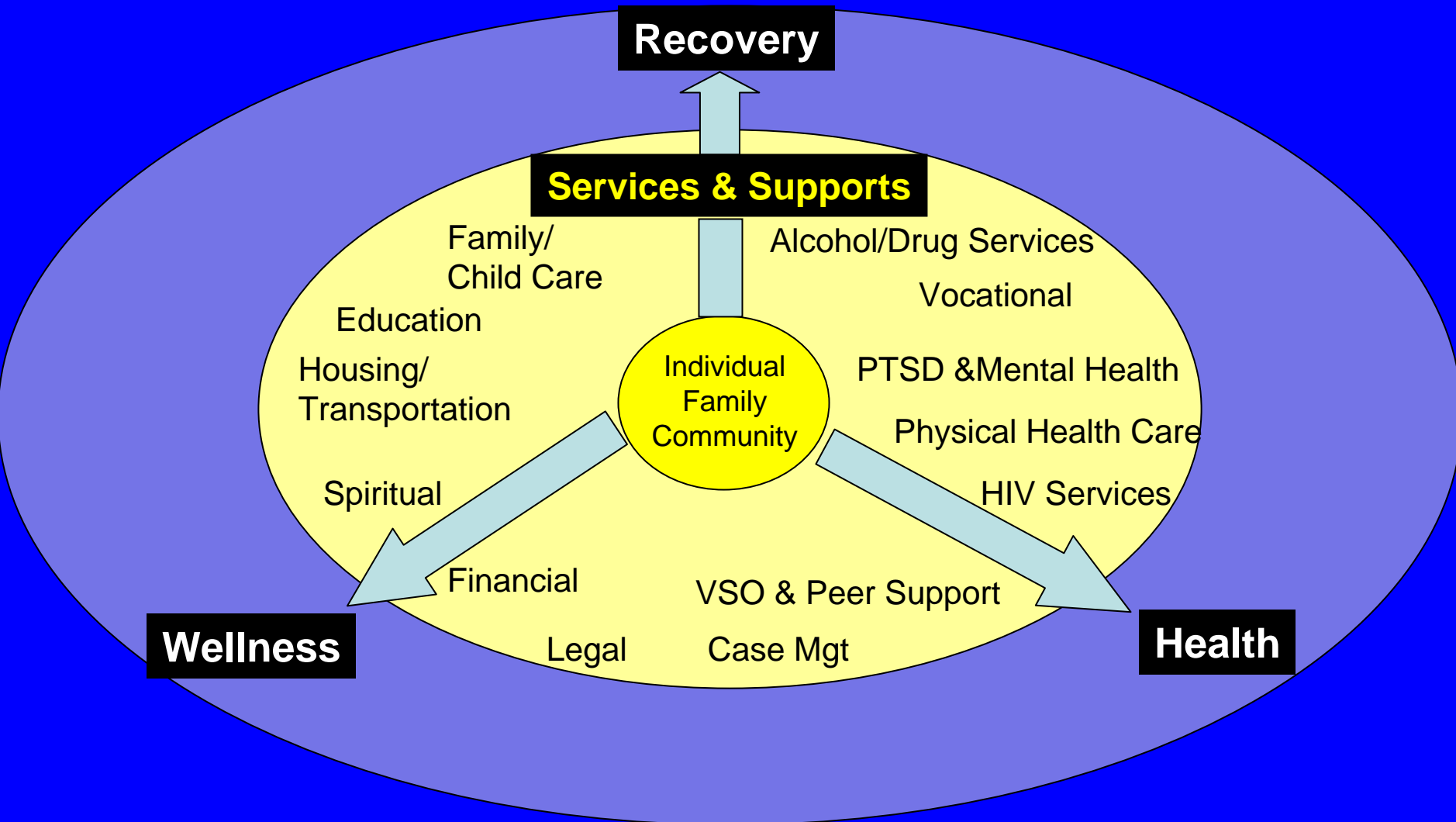


# **Components of a Recovery-Based Care System**

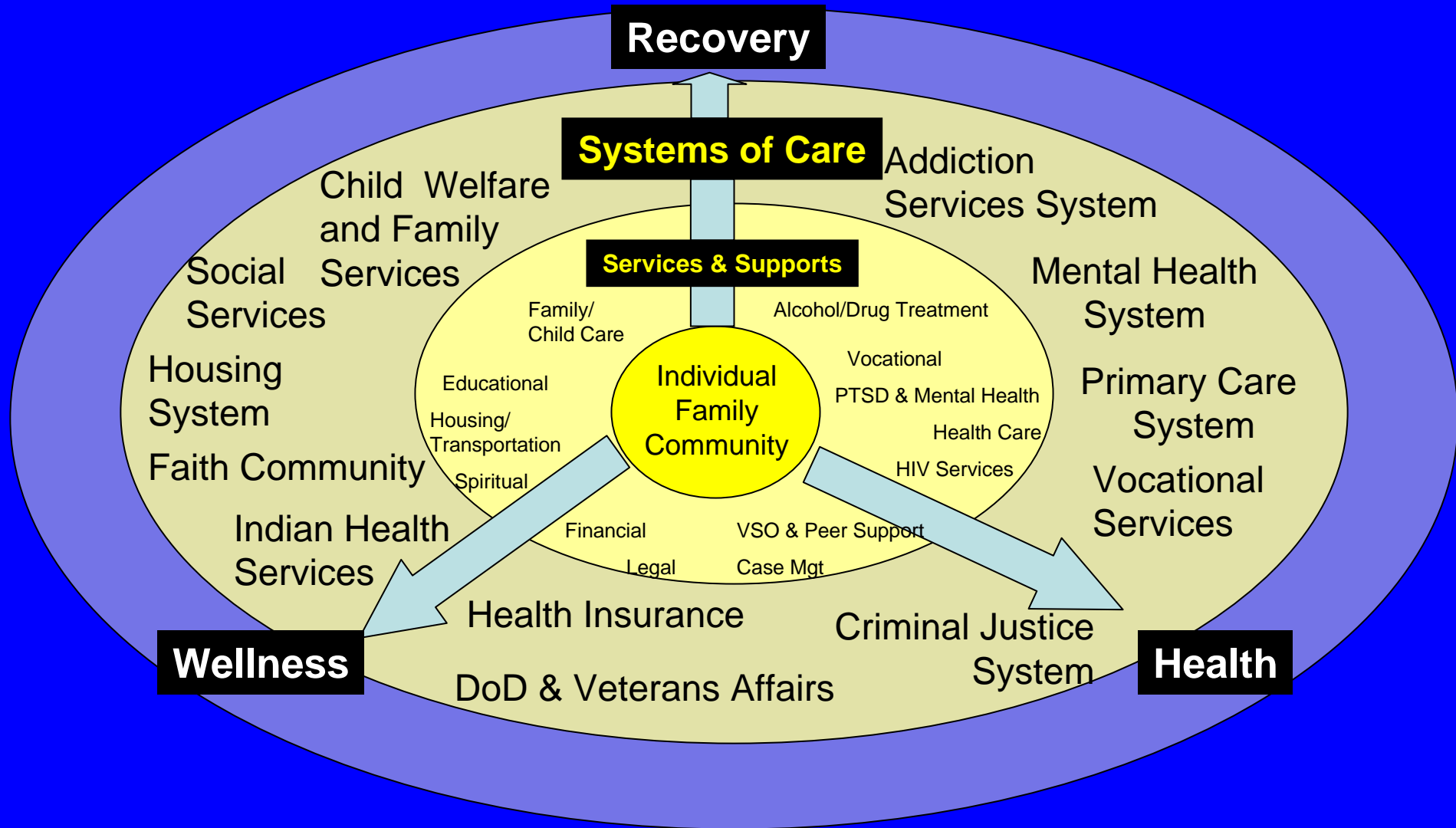
**Recovery-Based Care System:**  
*Person-centered and self-directed*



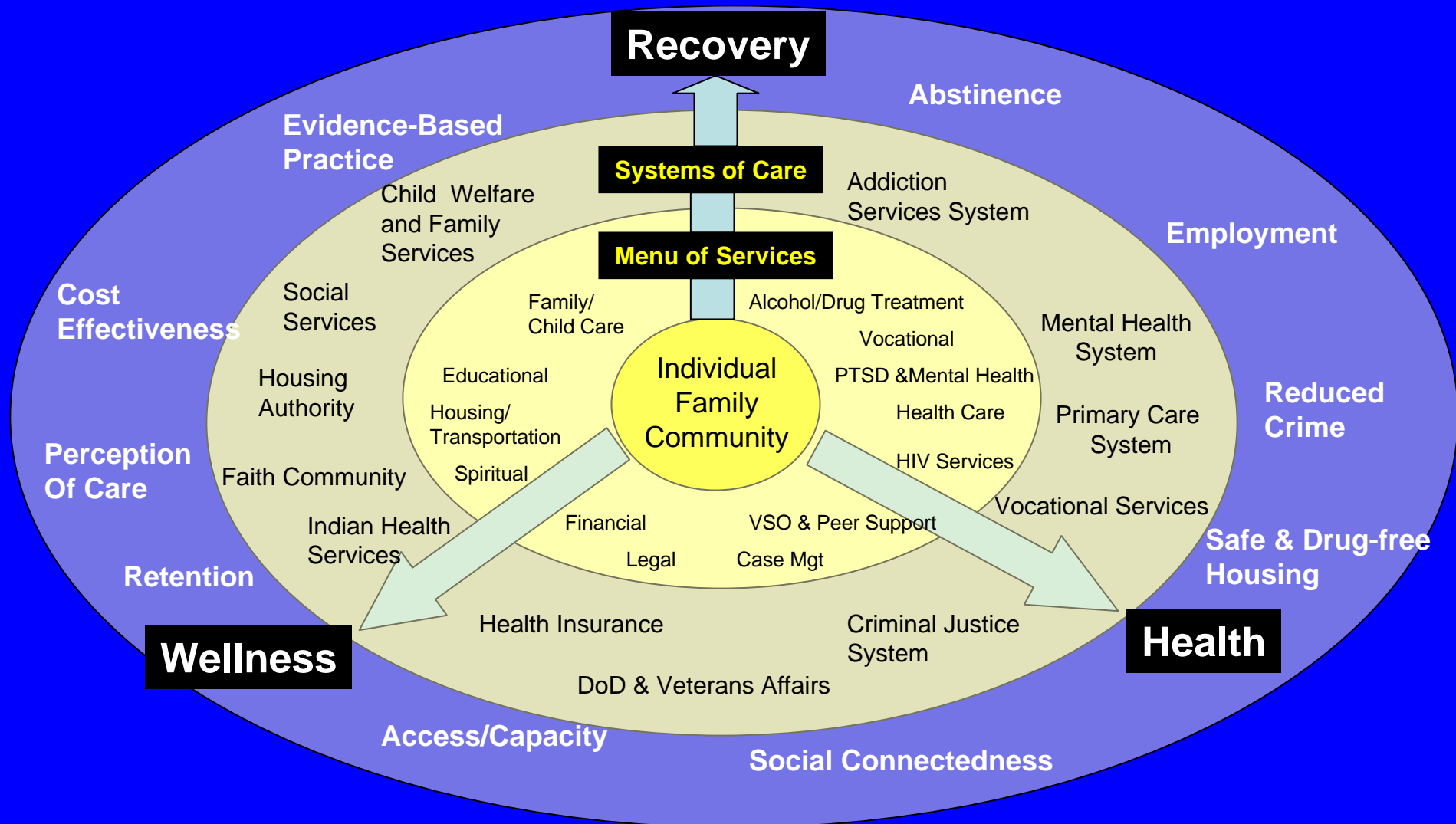
# Recovery-Based Care System: *Comprehensive menu of services and supports recovery*



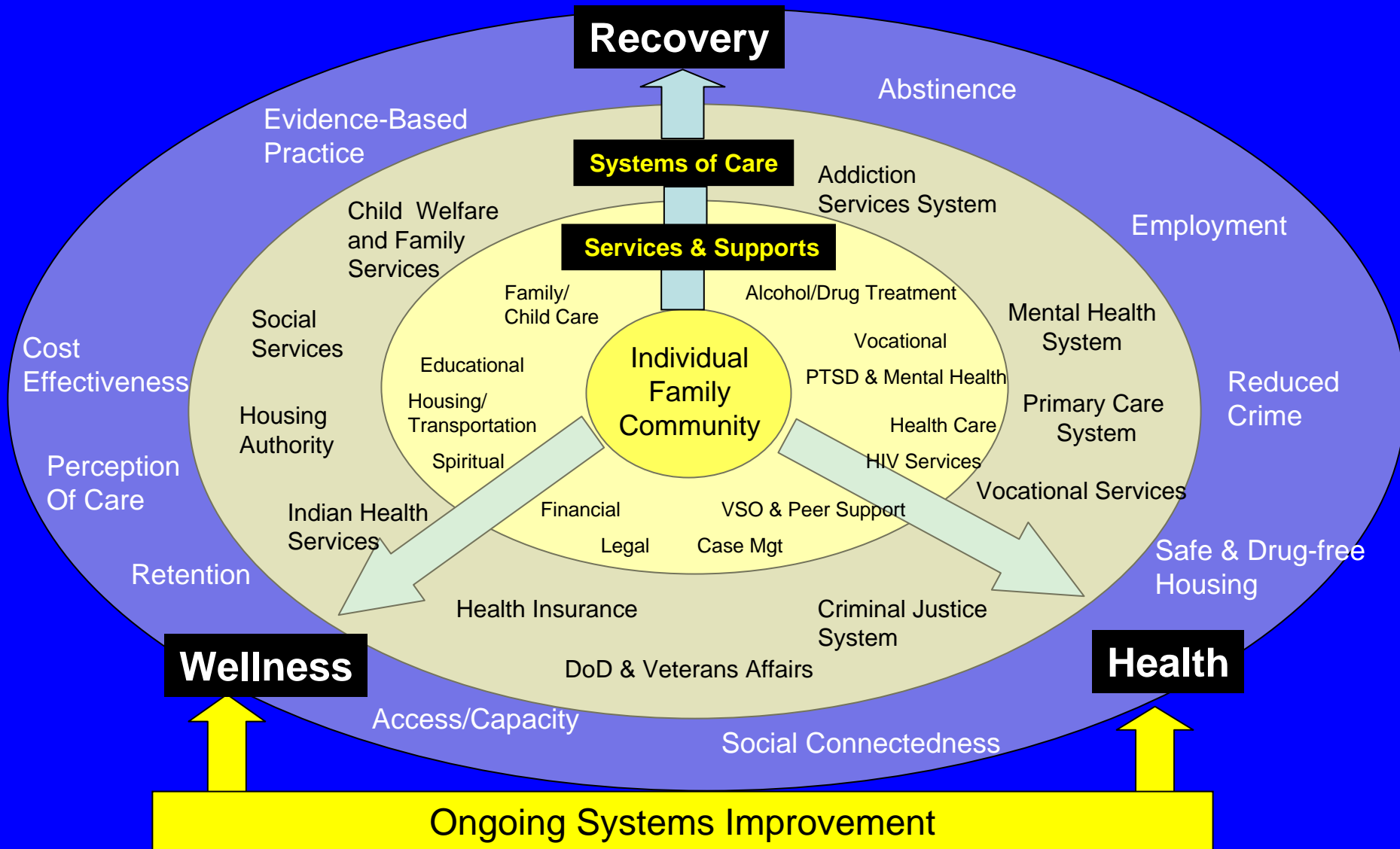
# Recovery-Based Care System: *Interface of multiple systems*



# Recovery-Based Care System: *Outcomes-driven approaches to care*



# Recovery-Based Care System: Ongoing process of systems improvement



# **Implications for Service Delivery**

**A Recovery-  
Oriented/Public  
Health Approach  
Focuses on Both  
“Upstream and  
Downstream”  
Services**



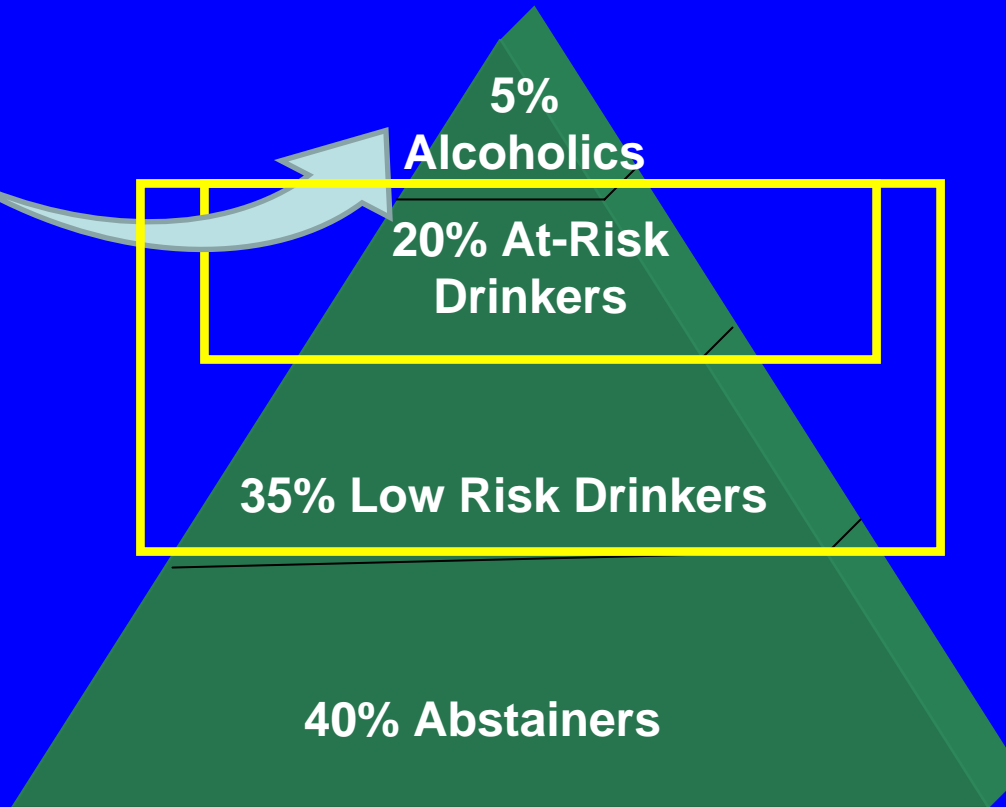
**Screening, Brief Intervention,  
and Referral to Treatment  
(SBIRT)**

# Substance Use-Related Visits to Emergency Department

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- Nearly 400,000 ED visits involved alcohol in combination with another drug (marijuana, cocaine, and/or heroin).
- Increasing mentions of prescription drug misuse.

# Traditional Substance Abuse Intervention



# Goals of SBIRT

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- Embeds screening/brief interventions and referrals within primary care settings (e.g., ED, CHC, Trauma Centers).
- Identifies patients who don't perceive a need for treatment.
- Helps move them into appropriate services.

# **SBIRT Takes Advantage of the “Teachable Moment”**

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A moment of educational opportunity – a time at which a person is likely to be particularly disposed to learn something or particularly responsive to being taught or made aware of something.

**Does SBIRT Work?**

# **SPIRT Effectiveness: Alcohol Use**

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- Numerous randomized studies conducted.
- Overall reduction of 56% in number of drinks (Burke et. al., 2003)
- US Preventive Services Task Force recommends the routine practice of alcohol screening and brief interventions in hospitals and other health care environments.
- SBI procedures for alcohol required for certification of all Level 1 Trauma Centers in the nation, as a standard component of care.

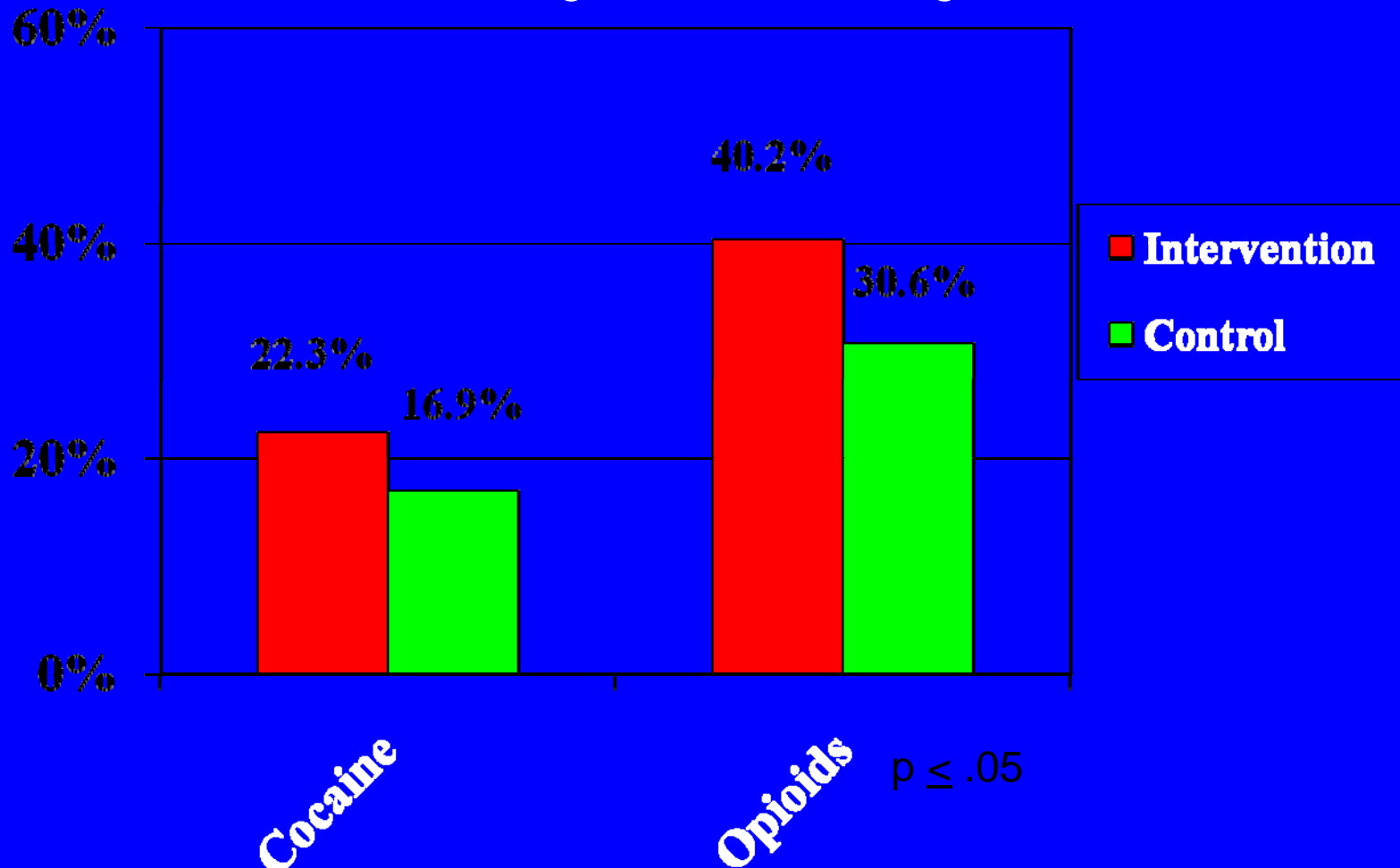
# SBIRT Effectiveness: Drug Use

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- Research is evolving/promising.
- Bernstein, et al. 2005: Randomized Controlled Trial
- WHO study, 2008: Randomized Controlled Trial in Multiple Sites Internationally

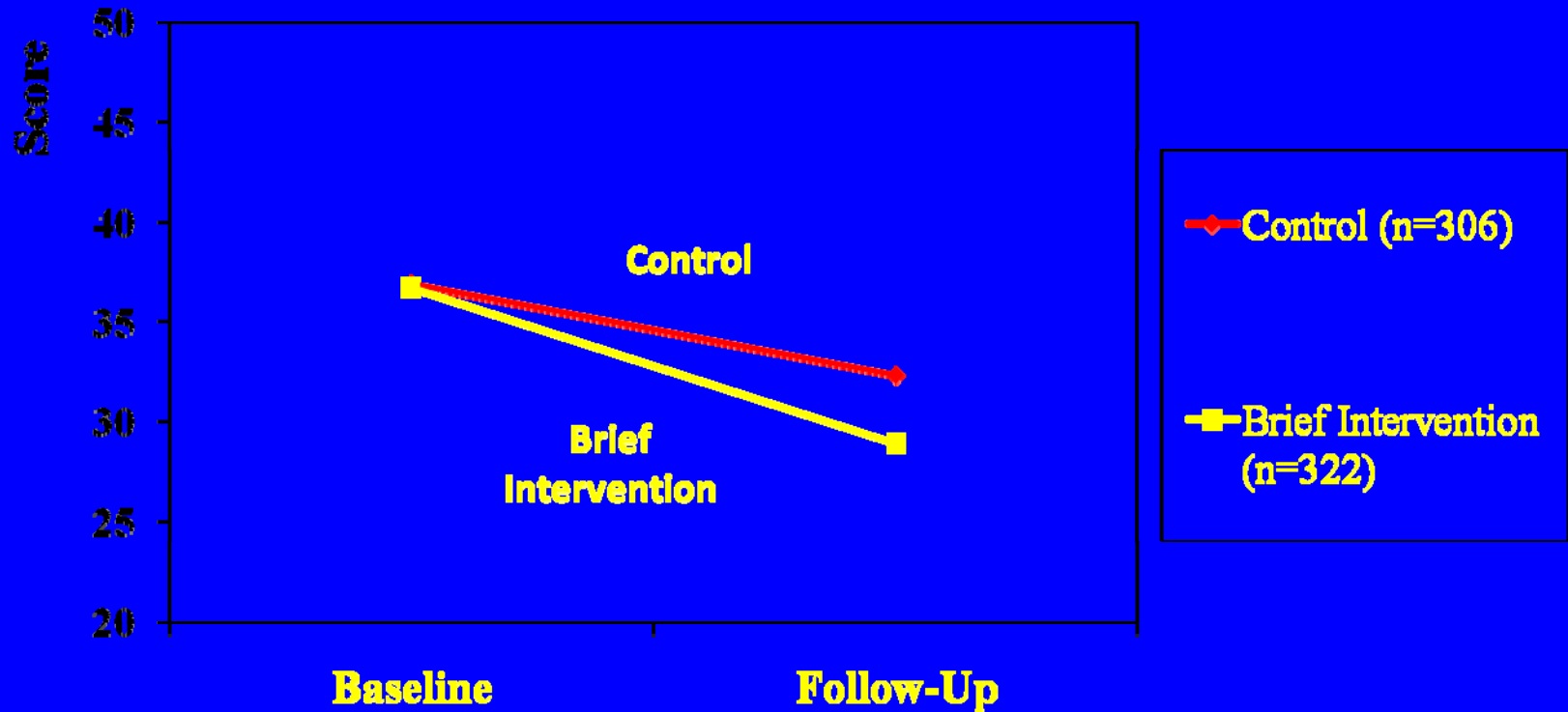
# Brief Motivational Intervention at a Clinic Reduces Cocaine and Heroin Use

6 Month Abstinence Among Those Screening Positive for At Baseline



# Illicit Substance Use Brief Intervention vs Control (N=628)

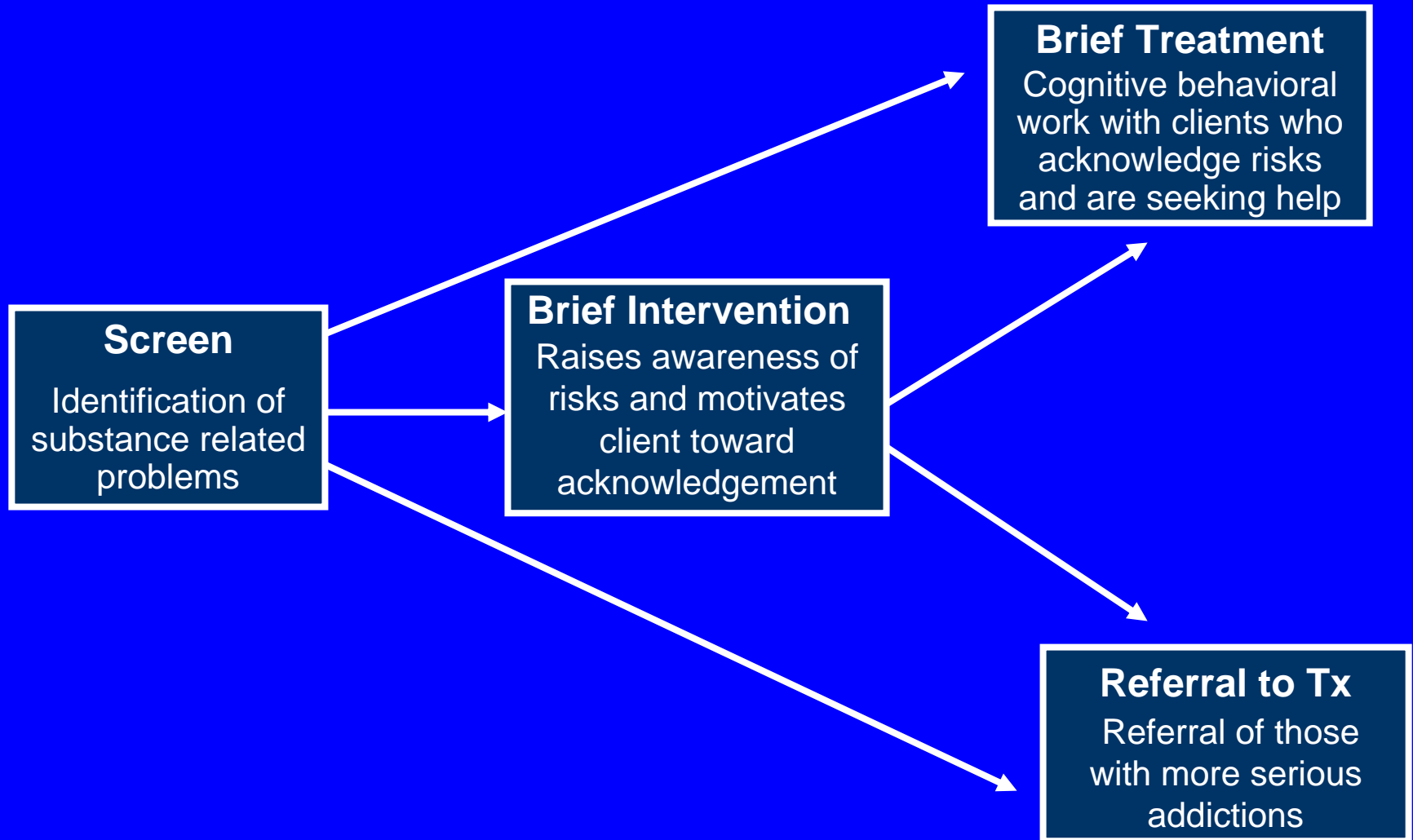
WHO ASSIST Phase III Technical Report, 2008: Pooled data



(F(1,624) = 7.6,  $p < 0.01$ , observed power = 78.4%,

alpha=0.05

# SBIRT: Core Components



# Screening


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- Quick method to identify individuals who may be at risk for developing problems
- Brief questionnaire about the context, frequency, and amount of alcohol or other drugs used by an individual.
- Valid/reliable tools: AUDIT, DAST, ASSIST


# Brief Intervention

## (1-3 Sessions)

Feedback about screening results, impairment, and risks while clarifying the findings



Inform patient about hazardous consumption limits and offer advice about change



Assess the patient's readiness to change



Negotiate goals and strategies for change



Arrange for follow-up treatment

# FRAMES Model

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- **F**eedback
- **R**esponsibility
- **A**dvice
- **M**enu of Options
- **E**mpathy
- **S**elf-Efficacy

# Brief Treatment

## (approx 10 Sessions)

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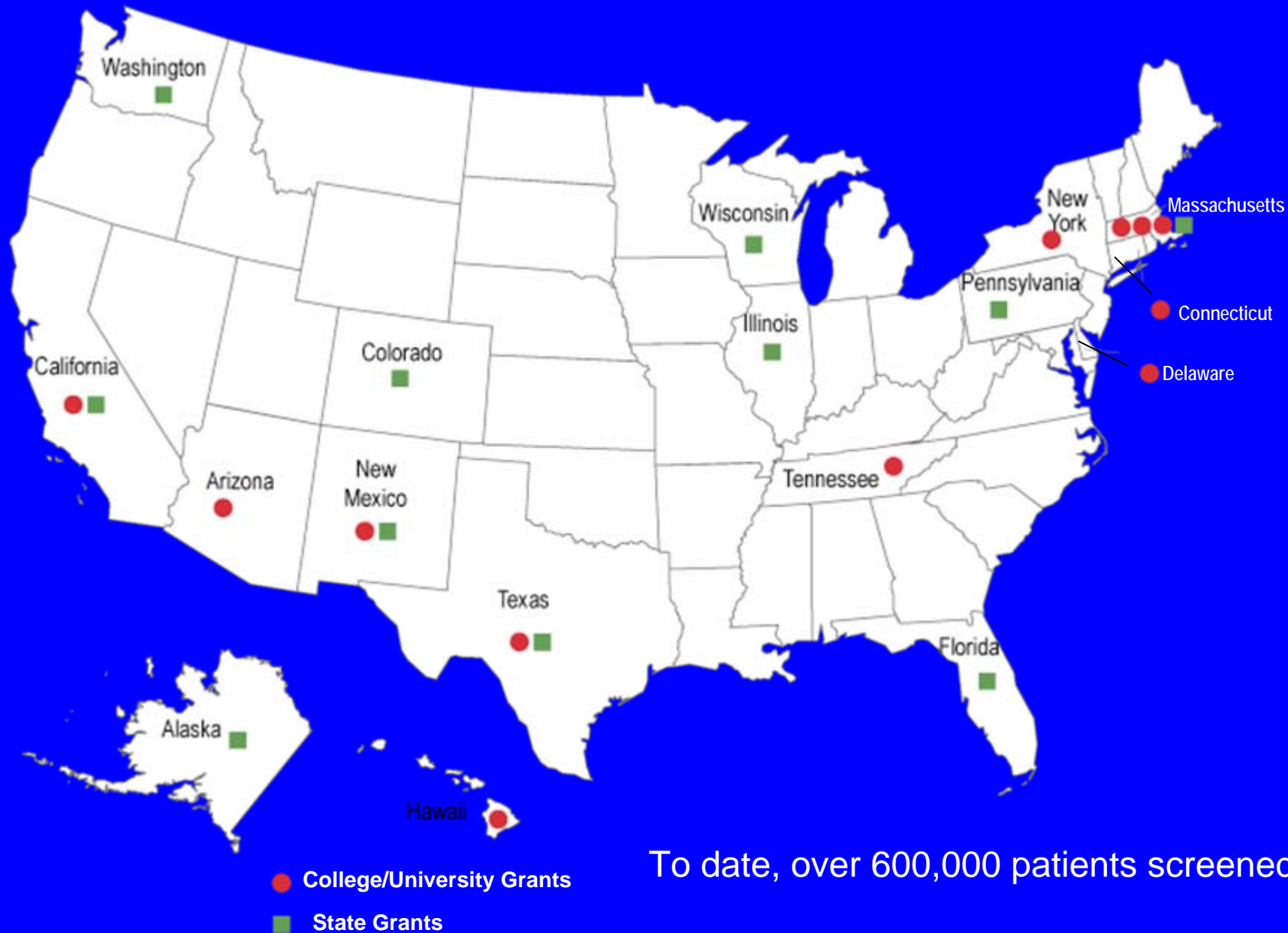
- Moderate to high risk screening scores.
- Similar to brief intervention, but more comprehensive with focus on problem solving and self-empowerment.
- Examples include:
  - Brief cognitive-behavioral therapy
  - Brief psychodynamic therapy
  - Brief family therapy

# Referral to Treatment

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- For individuals requiring more extensive resources than can be provided in a primary care setting.
- Established network of providers critical.

# SBIRT State and Campus Grantees



To date, over 600,000 patients screened

# SBIRT State Cooperative Agreement Awards



## 2003 Awards :

California	\$3.5m
Cook Inlet Tribal Council	\$1.7m
Illinois	\$3.5m
New Mexico	\$3.5m
Pennsylvania	\$3.0m
Texas	\$3.5m
<b>Washington</b>	<b>\$3.0m</b>

## 2006 Awards:

Colorado	\$2.8m
Florida	\$2.8m
Massachusetts	\$2.8m
Wisconsin	\$2.4m

**Over 600,000 individuals screened to date!**



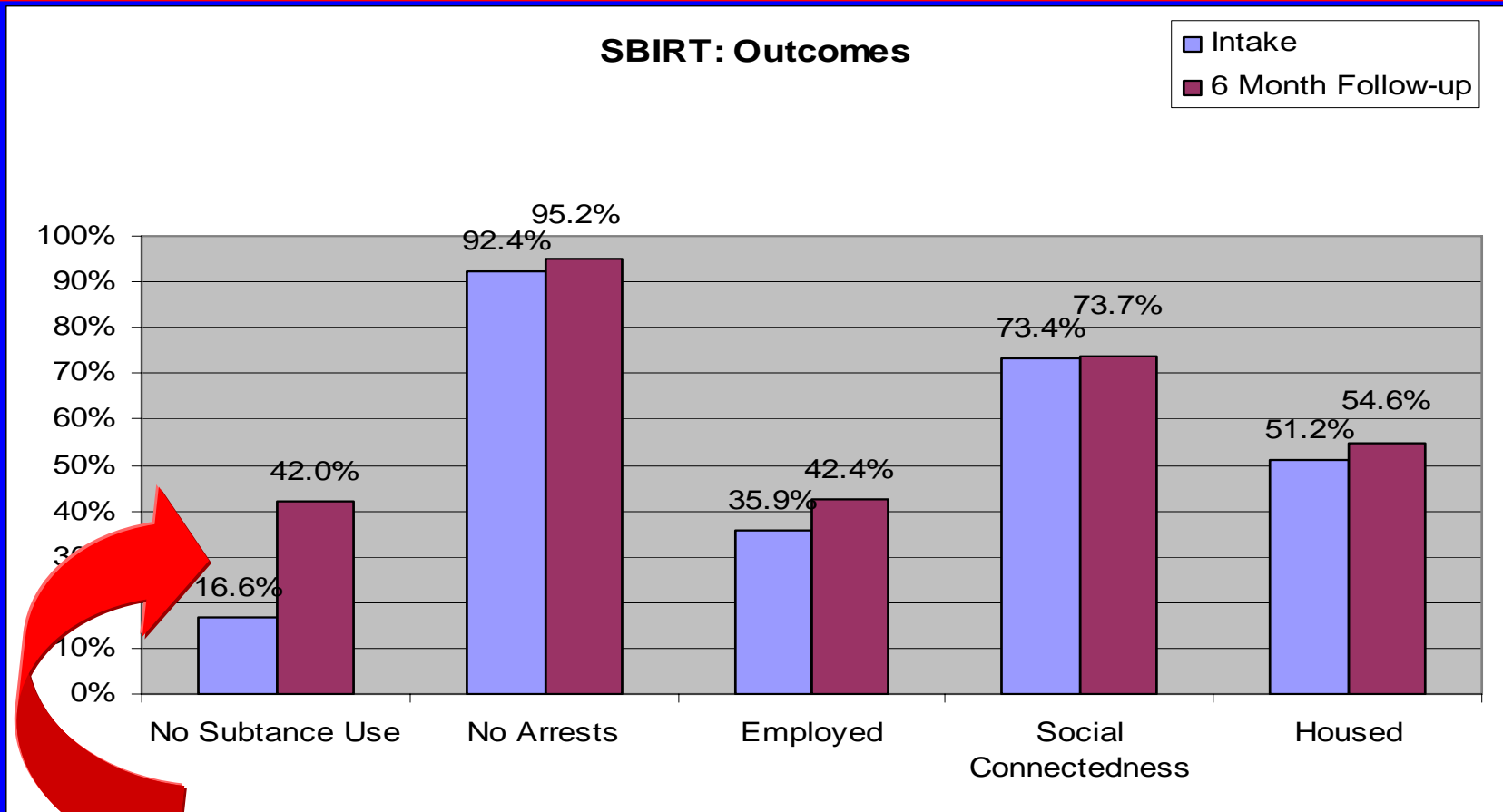
# FY 2005 College & University Grantees



Bristol Community College  
New Mexico Highlands University  
Northeastern University  
State University of New York at Albany  
University of Arizona  
University of California at Los Angeles  
University of Delaware  
University of Hartford  
University of Hawaii at Manoa  
University of Massachusetts at Amherst  
University of Tennessee  
University of Texas at El Paso



# SBIRT: Outcomes at 6 Month Follow-Up



- Clients reporting no substance use increased 153.8%
- Clients reporting no arrests increased 3.1%
- Clients reporting being employed increased 18.0%
- Clients reporting being socially connected increased 0.5%
- Clients reporting being housed increased 6.6%

# **Sustainability: Reimbursing for SBI**

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- **HCPCS Codes (Medicaid)**
  - H0049: Alcohol &/or Drug Screening (\$24)
  - H0050: Brief Intervention:15 mins. (\$48)
  
- **CMS G-Codes (Medicare)**
  - G0396: 15-30 mins (\$29.42)
  - G0397: > 30 mins (\$57.69)
  
- **CPT Codes (Commercial Health Plans)**
  - 99408: 15-30 mins (\$33.41)
  - 99409: > 30 mins (\$65.51)

# CSAT SBIRT Website

<http://sbirt.samhsa.gov>

- Information regarding the SBIRT Initiative, core clinical components, and screening instruments, and how to establish an SBIRT program.
- Online resources (e.g., training guides) links to curricula, organizations, publications, and references.
- SAMHSA/CSAT specific information, such as SBIRT Cooperative Agreements, grantee profiles, key CSAT SBIRT staff, meetings, training opportunities, and news.

The screenshot shows the Microsoft Internet Explorer browser window displaying the 'About SBIRT' page. The address bar shows the URL <http://sbirt.samhsa.gov/about.htm>. The page features a header with the SBIRT logo and the text 'Screening, Brief Intervention, Referral, and Treatment'. Below the header is a navigation menu with links to Home, About SBIRT, SBIRT Core Components, News, Tools and Resources, SAMHSA Resources, Contact Us, and FAQs. A prominent 'Register Now' button is visible, along with a box for 'Screening and Brief Intervention Training For Trauma Care Providers'. The main content area includes sections for 'About SBIRT', 'An Early Intervention Approach', 'New Target Population', and 'System for Assessment, Intervention, and Treatment'. The browser's taskbar at the bottom shows the Start button and several open applications, including AIM Today, Internet Explorer, Microsoft Office, and iTunes.

# Access to Recovery (ATR)

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- Presidential Initiative designed to promote client choice through:
  - the expansion of treatment capacity;
  - the implementation of a voucher system;
  - the inclusion of non-traditional substance abuse treatment providers, such as faith- and community based organizations.

# State of Washington

## Access to Recovery II

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- In 2007, Washington was awarded approximately \$13.9 million over three years.
- Program objectives:
  - provide social service intervention to individuals in crisis.
  - Individuals and families work with assigned recovery support specialists to develop personal recovery plans that identify services needed to achieve and maintain abstinence.
  - Individuals with recent history of methamphetamine use or incarceration will be prioritized for enrollment to support stated program goals.

# SAMHSA Grant Awards - Washington

<b>Formula Funding</b>	<b>Fiscal Year 2007/2008</b>
Substance Abuse Prevention and Treatment Block Grant:	\$34,857,640
Community Mental Health Services Block Grant:	\$8,339,200
Projects for Assistance in Transition from Homelessness (PATH):	\$1,046,000
Protection and Advocacy Formula Grant:	\$544,728
<b>Subtotal of Formula Funding:</b>	<b>\$44,787,568</b>
<b>Discretionary Funding</b>	<b>Fiscal Year 2007/2008</b>
Mental Health:	\$4,401,914
Substance Abuse Prevention:	\$5,898,302
Substance Abuse Treatment:	\$10,874,132
<b>Subtotal of Discretionary Funding:</b>	<b>\$21,174,348</b>
Total Mental Health Funds:	\$14,331,842
Total Substance Abuse Funds:	\$51,630,074
<b>Total Funds:</b>	<b>\$65,961,916</b>

# CSAT Grants: Washington

- Multifaith Works (Seattle): *Recovery Community Services Program*
- Washington Alcohol and Substance Abuse Division-Adolescent (Olympia): *State Adolescent Coord*
- Washington State Dept of Social/Health Services (Olympia): *ATR, Accreditation of OTPs, SBIRT*
- Clark County (Vancouver): *Young Offender Reentry Program*
- Spokane County (Spokane): *Homeless Addiction Treatment*
- Community Counseling Institute (Tacoma): *HIV*
- Neighborhood House (Seattle): *HIV*
- People of Color Against AIDS: *HIV*

# Washington Grantee

## Overall Performance Outcomes

<b>Change in Percent of Clients</b>	<b>% Change Between Admission &amp; Discharge</b>
With No Arrests	Increased 51.9%
Reporting Abstinence from Alcohol	Increased 18.2%
Reporting Abstinence from Drugs	Increased 24.4%

# “ATR”

by Carmen (Pierce County)

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I am thankful for this chance, for belief in me when I had none...

Everyday I see more positive things that I can get done.

My plan now is to enjoy what I have been missin; I am taking daily steps not crying and wishin.

I've made positive strides in the right direction, And I'm MAYOR AGAIN...I won the election!!

**Paving the Road Home:  
The National Behavioral Health Conference  
and Policy Academy  
on Returning Veterans and Their Families**

**August 11, 2008  
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[www.returningveteransconference.com](http://www.returningveteransconference.com)

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