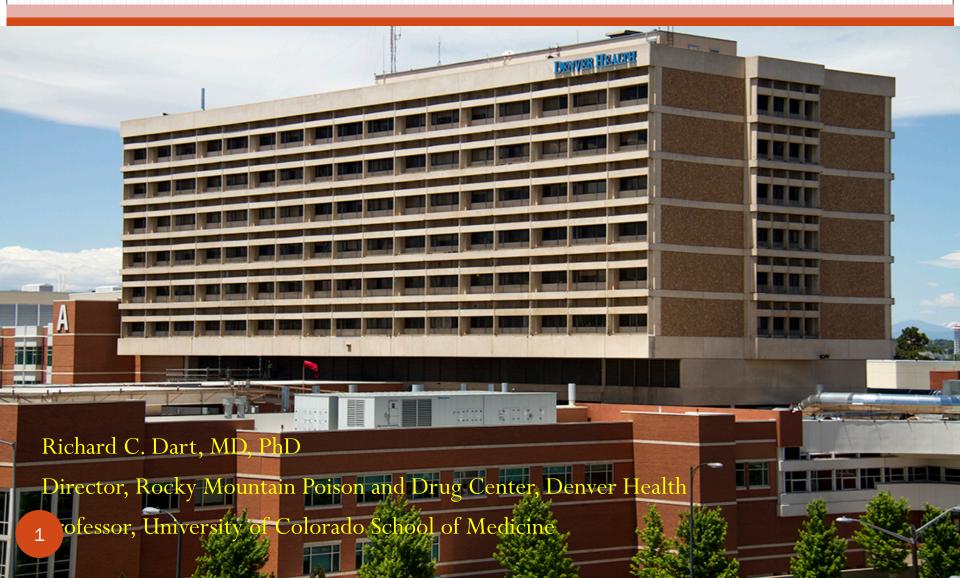
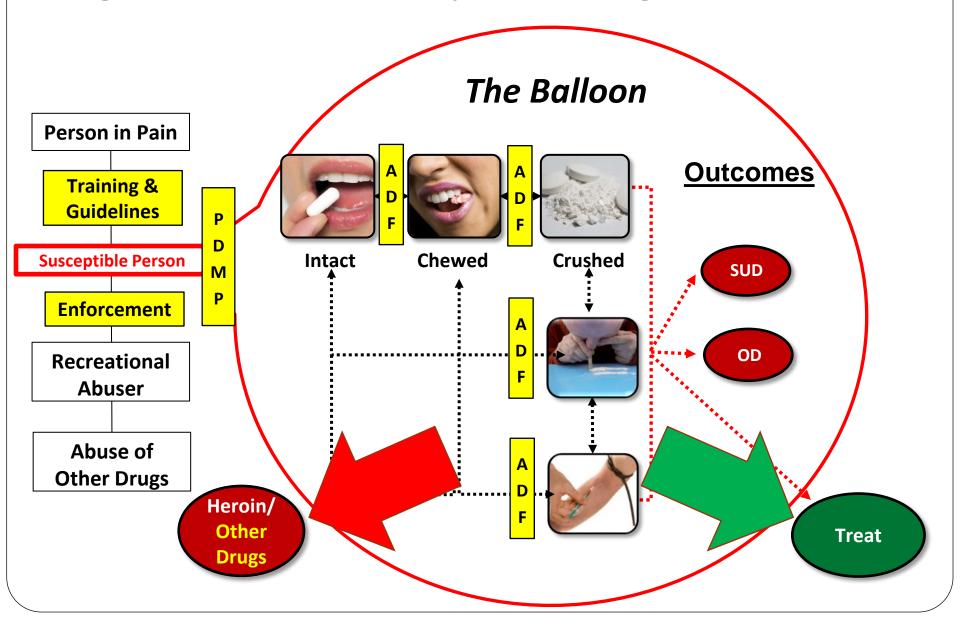
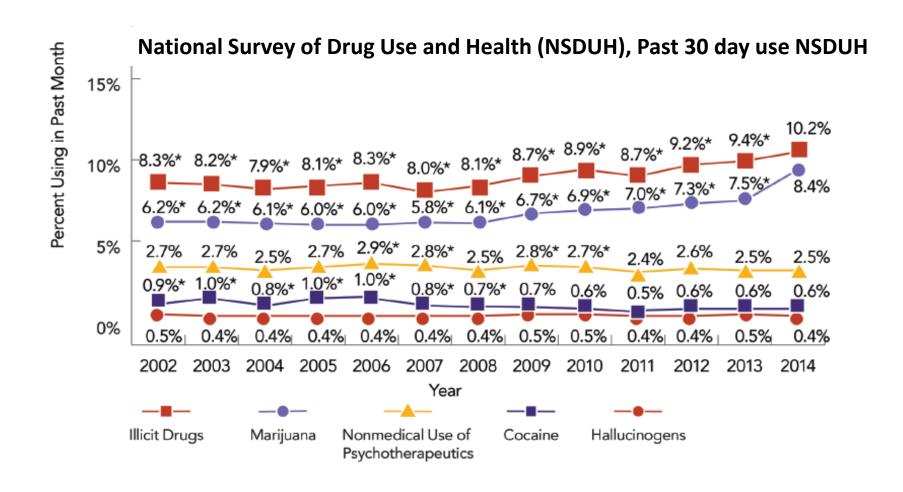
## Potential Solutions to Epidemic Substance Abuse in US and Europe



## Progression of Prescription Drug Abuse



## Abuse of Illicit and Licit Drugs is High



## The War on Drugs

The Guardian (UK):

We have been losing the war on drugs for four decades - end it now

As other nations have been rethinking their approach and admitting mistakes, British politicians have been too scared to embrace reform

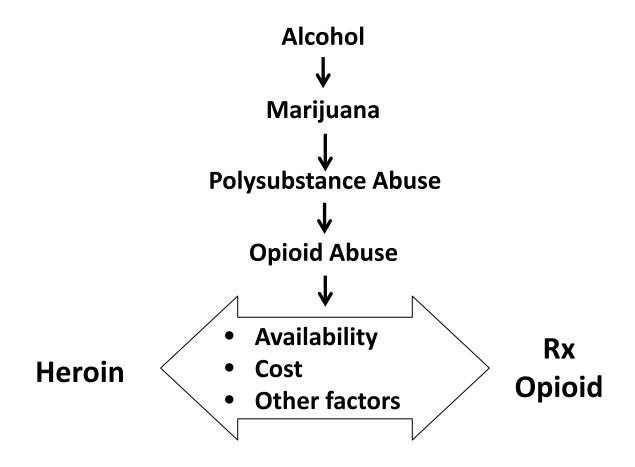
#### **US News and World Report:**

## We Have Lost the War on Drugs

The number of people who died of drug overdoses in 2014 is double those who died in 2000.

By Jeff Nesbit, Contributor | Dec. 21, 2015, at 1:34 p.m.

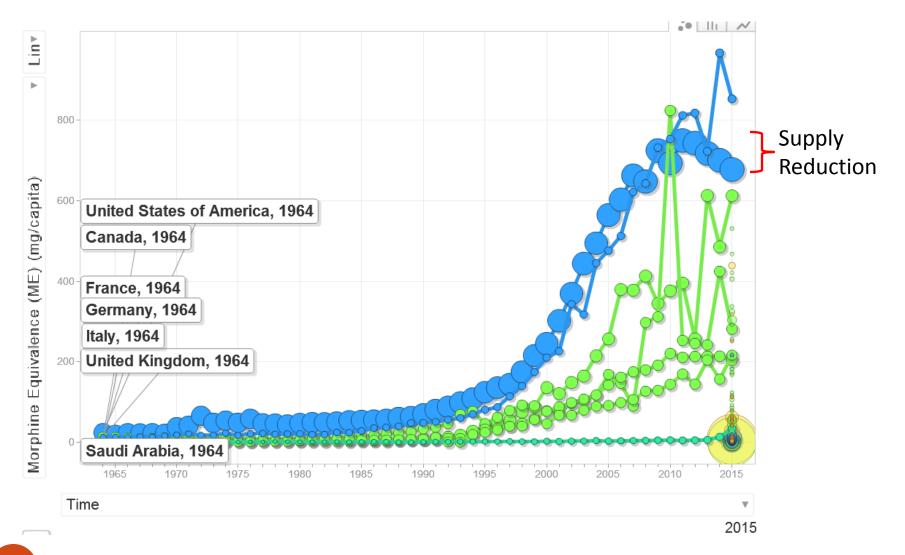
## Opioids - Push? Or Pull?



## Drug Abuse Strategies: Supply vs. Demand

- Supply reduction
  - Better law enforcement can reduce the amount of drug available to abuse
  - No drug = no abuse, but very difficult to achieve
- Demand reduction
  - If people don't want to abuse drugs (e.g. there is no market for sale of drugs), then there will be no supply.
  - Community Coalitions
  - Substance abuse treatment facilities
- Harm reduction
  - Measures to reduce the harm produced by drug abuse (e.g. needle exchange programs, take-home naloxone, etc.)

## Supply of Legal Opioid Analgesics

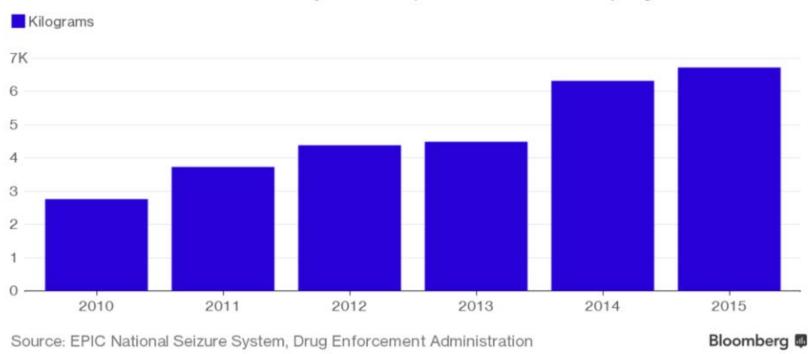


ttps://ppsg.medicine.wisc.edu/chart

## Supply of Heroin in the United States

#### **Heroin Seizures Increase 243 Percent in Five Years**

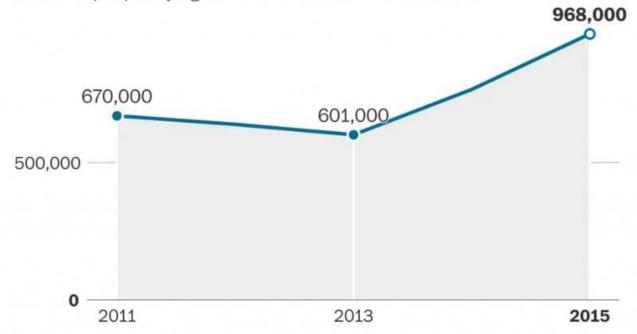
With an increase in heroin availability in the U.S., authorities are intercepting more of it.



## Cocaine Supply in the United States

#### New cocaine users in U.S.

The number of people trying cocaine in the U.S. has increased.



Source: U.S. Substance Abuse and Mental Health Services Administration

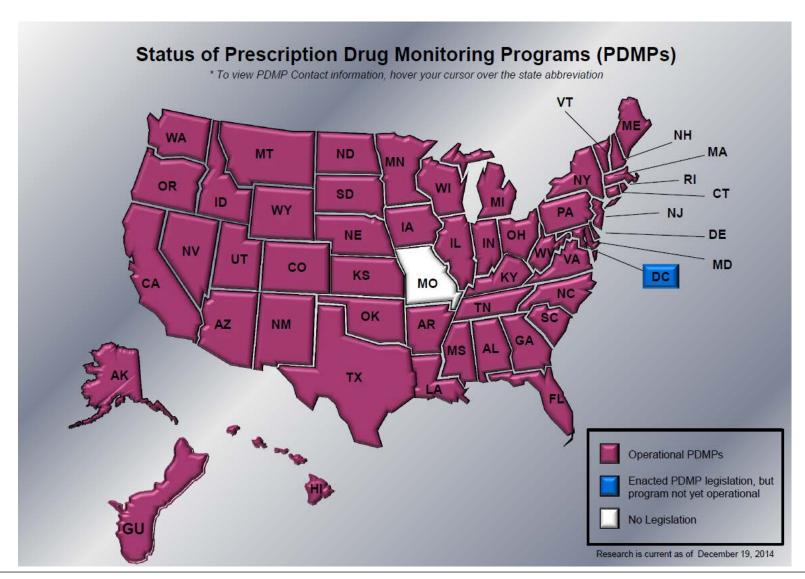
Source: State Department

## **Supply Reduction**

## The War on Drugs: Supply Reduction

- Several thousand laws enacted throughout United States
- New field of enforcement Prescription Drug Abuse Investigators
- Prescriber education and training
  - CDC Prescribing guidelines
  - US FDA
  - National Institute of Drug Abuse
- Prescription Drug Monitoring Plans
- Drug Take-back days

# Supply Reduction: Prescription Drug Monitoring Plans (PDMP)

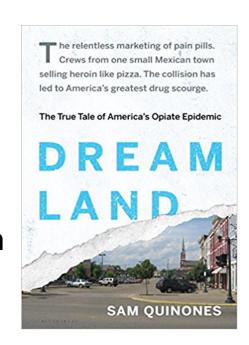


## Prescription Drug Monitoring Plans



## Supply Reduction – Failed Strategy?

- Demand always seems to outstrip supply
  - Marked increase in abuse of most drugs despite extensive Law Enforcement Efforts
- Innovative marketing and distribution by Mexican cartel have been very successful
- In a open society, it seems impossible that this strategy alone could be successful



## **Demand Reduction**

#### **Demand Reduction**

- Innate human desire for substances of abuse
- Strategies
  - Substance abuse treatment
  - Community education
    - Community at large
    - Healthcare professionals
    - Law enforcement
    - Everyone
- Community intervention
  - Combines both supply and demand reduction

#### Substance Abuse Treatment

- Counseling and mental health treatment (depression, etc.)
- Medication assisted therapy
  - Methadone
  - Buprenorphine
  - Reduces criminal activity and high risk behaviors

## **Community Interventions**

- How can we change the behavior of the whole community to discourage the attitudes and behaviors that foster substance abuse?
  - Project UNITE
  - Project Lazarus
  - Many other similar

## Project Lazarus – North Carolina, USA

Provider

↑ drug

treatment

education

Community Community- and school-based; Campaign warnings not to share education medications; radio, newspaper; and stakeholder forums

Diversion Collect unused medications (pill "take-back days"); disposal sites in public locations; training of law enforcement officials

Support Support groups and extra clinical services for patients with pain and supervision of local pain clinics; education for pain patients

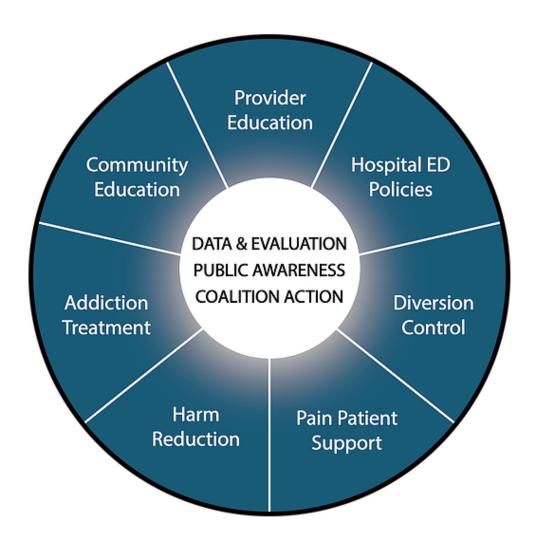
Training sessions on pain; peer education on prescribing; tool kits on chronic pain and substance abuse; SBIRT; referral of high-risk patients. Clinician education about naloxone; referral to specialized treatment, referral to "Lock-In" program for high-use patients

Hospital Promote opioid prescription policies in hospital EDs (limits on ED policy amounts of controlled substance dispensed and require the provider change to check the PDMP

Increase the availability of substance abuse treatment to increase the number of providers of office-based treatment.

Naloxone Develop policies facilitating naloxone distribution, provide naloxone policies **kits** and education for appropriate use with families and peers.

## Project Lazarus



- PROVIDER EDUC
- NALOXONE
- COMMUNITY ED
- PAIN PATIENT SU
- PUBLIC AWAREN
- PAIN MANAGEMI
- HOSPITAL ED PQ
- DATA & EVALUAT
- ADDICTION TRE
- HARM REDUCT
- DIVERSION CON
- <u>LEGISLATION</u>

### **Provider Education**

- Educate prescribers one-on-one
- Provide toolkits to providers
- CME on pain management
- Pharmacist education
- Naloxone instruction

## Community Naloxone

- Naloxone Rescue Kits supplied to individuals, families, community organizations, health departments, and law enforcement personnel.
- The kit contents are stored safely in a durable plastic box that easily fits into drawers, backpacks, car dashboards, and bathroom cabinets.

## **Community Education**

- Town hall meetings
- Specialized task forces
- Build community-based leadership
- Coalition building
- "Managing Chronic Pain" toolkit assembled
- Press conferences
- Webpage development
- Presentations at health fairs

## Pain Patient Support

- Promoting adoption of the CPI toolkits for primary care providers, EDs, and care managers.
- Medicaid policy change: Mandatory use of patient provider agreements, medical home, and pharmacy home for high risk patients which could also be adopted by private insurance companies.
- Support groups for pain patients and their families.
- ED case manager for patients with chronic pain.
- Medical practice vetting of local pain clinics and facilitation of specialized pain clinic referrals.

#### **Public Awareness**

- Town Hall Meetings
- Specialized Task Forces
- Youth Prevention Teams
- Billboards, posters, and flyers
- Presentations at colleges, community forums, civic organizations, churches, schools, and military bases
- Radio and Newspaper Advertisements



#### **Diversion Control**

- Hiring and training drug diversion specialized law enforcement officers.
- Unused medication take-back events by sheriff and police departments
- Fixed medicine disposal sites at law enforcement offices.
- Project Pill Drop, supplying county law enforcement agencies, clinics, and pharmacies with permanent take back dropboxes.
- Encouraging the use of locked storage for controlled substances in the home.

#### **ED Policies**

- ED will avoid treatment of chronic pain- refer to the patient's primary care provider, pain specialist, or dentist
- ED will avoid providing refills for chronic pain medications
- ED provider will check the PDMP (CSRS) before prescribing
- ED will limit the number of doses of controlled medications dispensed or prescribed.
- Case manager position to work specifically with patients dealing with chronic pain and substance abuse issues

### **Addiction Treatment**

Opening of a satellite office-based drug treatment clinic

- Advocating for treatment services
- Peer support specialist services
- Getting eligible people enrolled in Medicaid.

Treatment awareness campaigns, including real life

success stories



# Project Lazarus: Multifaceted Approach Successful in Wilkes County

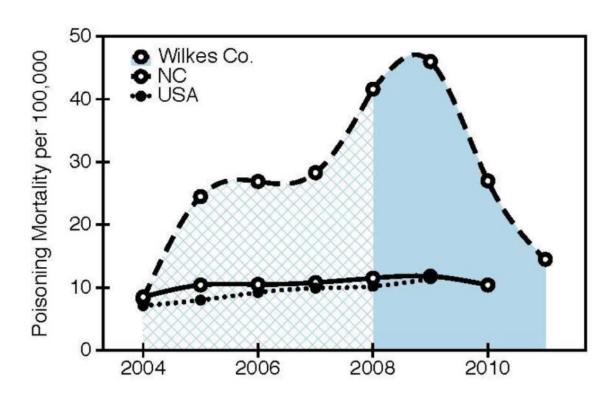


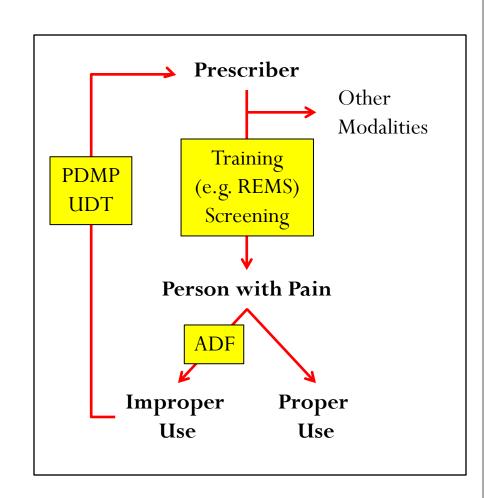
Figure 2: Poisoning Mortality Rate in Wilkes County, NC and in the United States

### Harm Reduction

- Needle exchange program
  - Reduce HIV, Hepatitis B and C
- Supervised injection programs
  - Reduce HIV, Hepatitis B and C
  - Reduce overdose (naloxone)
- Take-home naloxone
  - Reduce overdose deaths

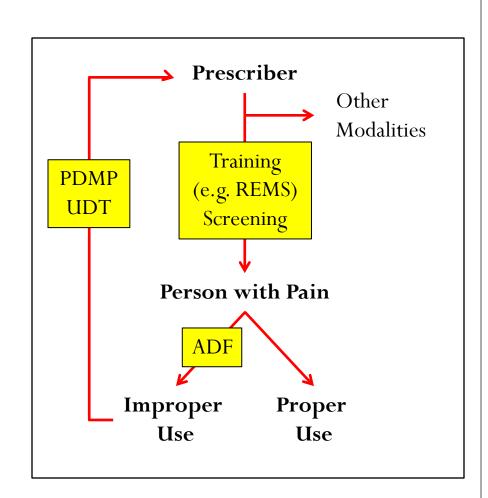
## Public Health Strategies – Rx Drugs

- Reduce demand
  - Healthy communities
  - ADFs
- Reduce supply
  - Appropriate prescribing
  - Prescriber training
- Intervene early
  - ADFs
  - PDMP
  - UDT
  - Substance Abuse Treatment programs
- Remember the patient



## Public Health Strategies – Illegal Drugs

- Reduce demand
  - Healthy communities
- Reduce supply
  - Law Enforcement
- Intervene early
  - Substance Abuse
    Treatment programs



## Summary

- Supply reduction is important to limit availability, but cannot be successful alone.
  - Demand is too high and the rewards too great.
- Demand reduction is needed
  - Difficult to achieve
  - Many collateral benefits
    - Decreased crime
    - Increased safety