

Emerging Drug Trends in Washington

Alcohol &
Drug Abuse
Institute

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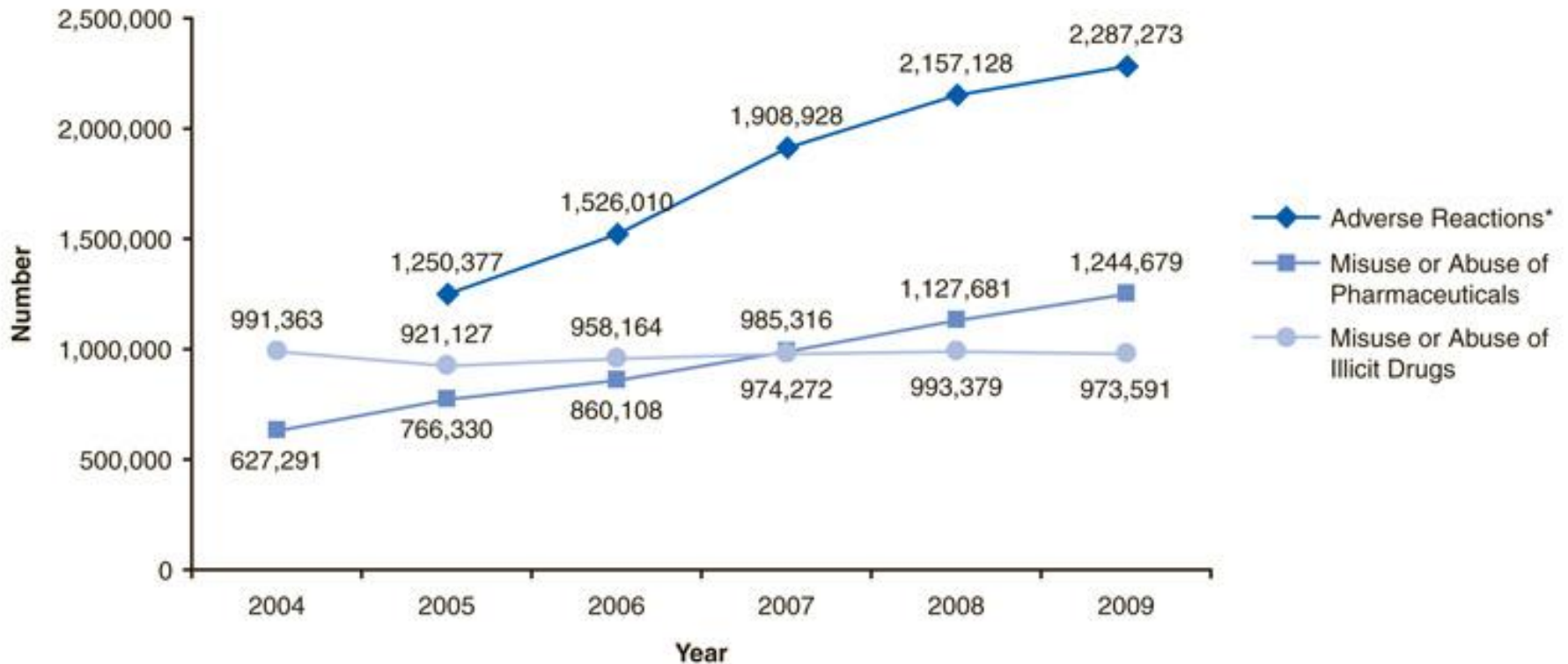
August 1, 2012

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adai.washington.edu

Outline

- National drug trends
- Drug trends in WA State & King County
- Opioid related problems
- Interventions

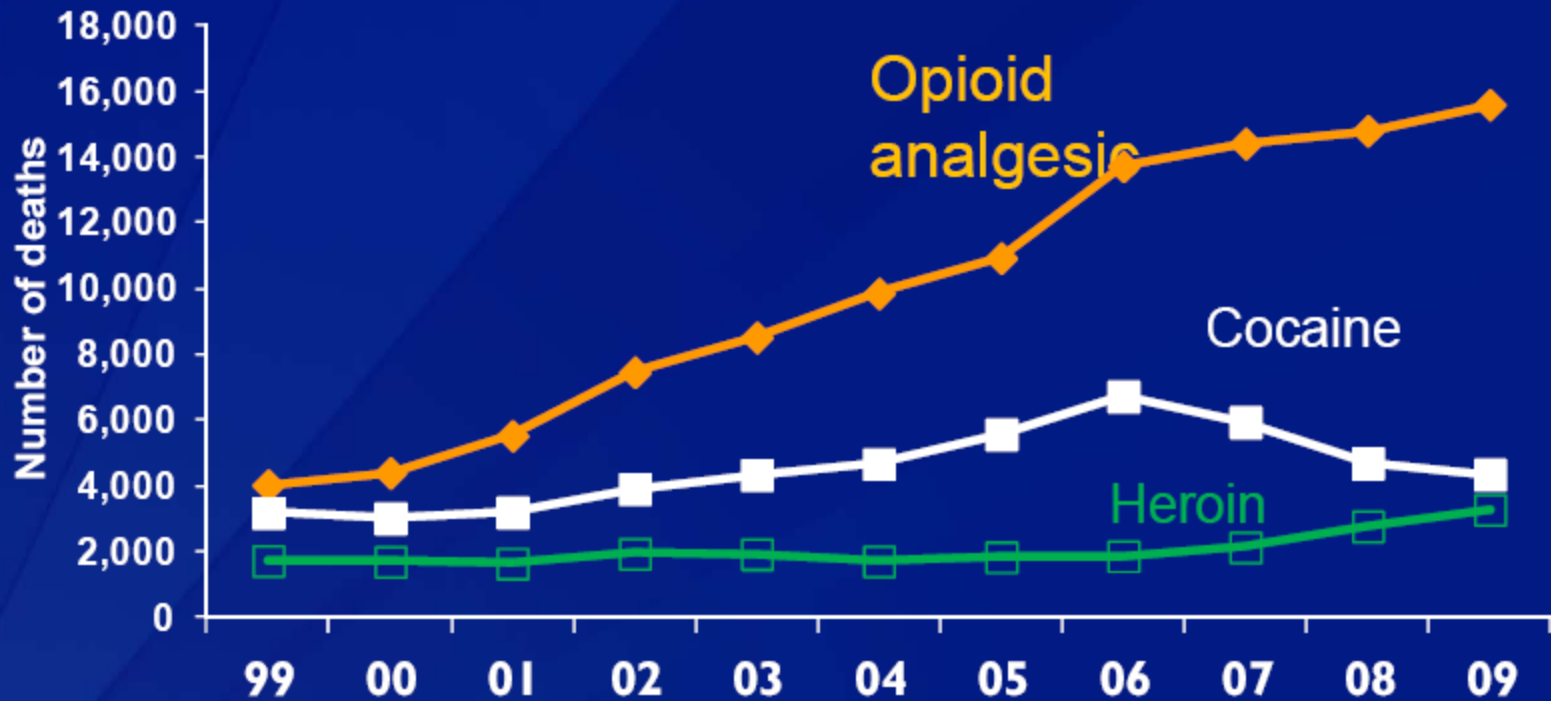
U.S. Drug-Related ED Visits, by Type of Visit: 2004 to 2009



* Data for ED visits involving adverse reactions to pharmaceuticals are not available for 2004.

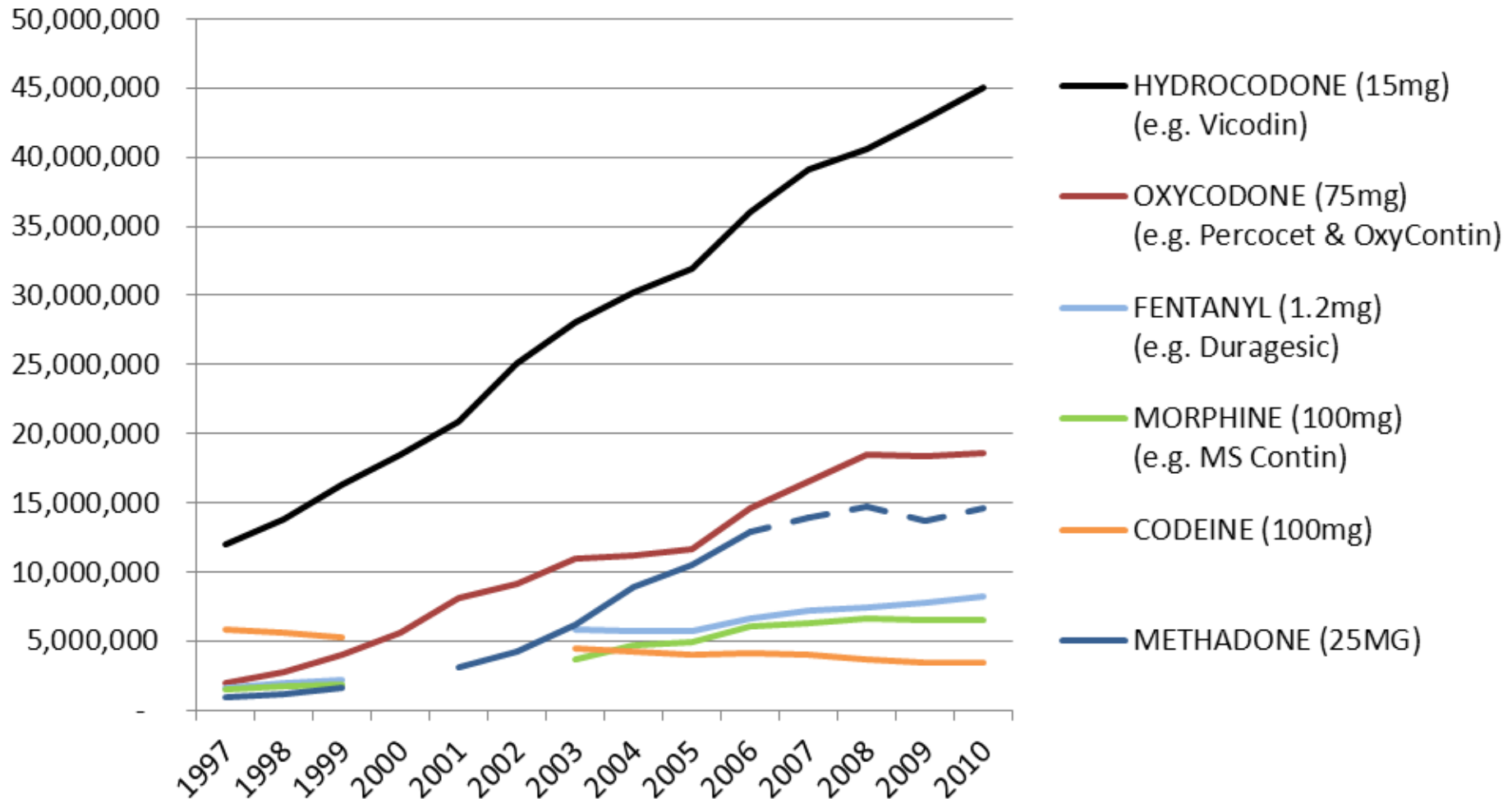
Source: 2004 to 2009 SAMHSA Drug Abuse Warning Network (DAWN).

Drug overdose deaths of all intents by major drug type, U.S., 1999-2009



Source: National Vital Statistics System. The reported 2009 numbers are underestimates. Some overdose deaths were not included in the total for 2009 because of delayed reporting of the final cause of death.

Opioid Sales in WA State, Estimated # daily doses sold annually



Methadone does not include methadone dispensed by narcotic treatment programs. Methadone data provided by DEA for 2007-2010 included narcotic treatment programs, estimates removing expected NTP use are shown with a dashed line

Source: Drug Enforcement Administration Automation of Reports and Consolidated Orders System, data include medications prescribed and dispensed.

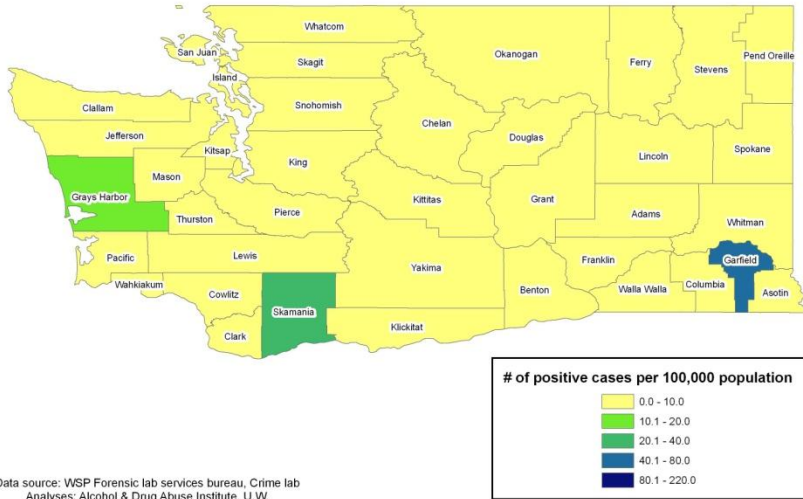
Data provided to and analyzed by Caleb Banta-Green Alcohol & Drug Abuse Institute, University of Washington

Defined Daily Dose utilized from WHO <http://www.whooc.no/atcddd/>

WSP Crime Lab Data- [supply indicator]

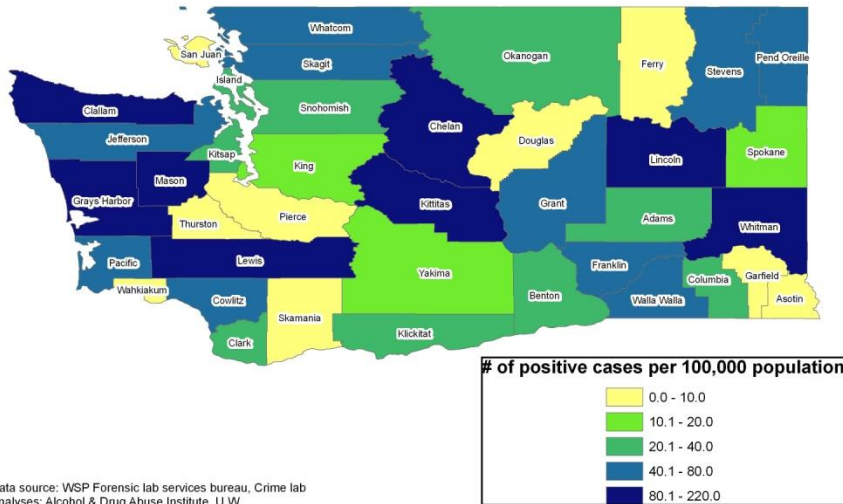
- Evidence submitted by law enforcement for testing to State lab
- Weaknesses:
 - Policies vary across place and time e.g. submit all evidence or only for cases going to trial?
 - Enforcement priorities and capacity change over time
 - Time lag, most data are tested in year seized, but data can be several years old
- Strengths:
 - Specific drugs identified, weight, appearance
 - Data for every police jurisdiction in the state

Rx Opiates Detected in Police Evidence, 2000



Data source: WSP Forensic lab services bureau, Crime lab
Analyses: Alcohol & Drug Abuse Institute, U.W.

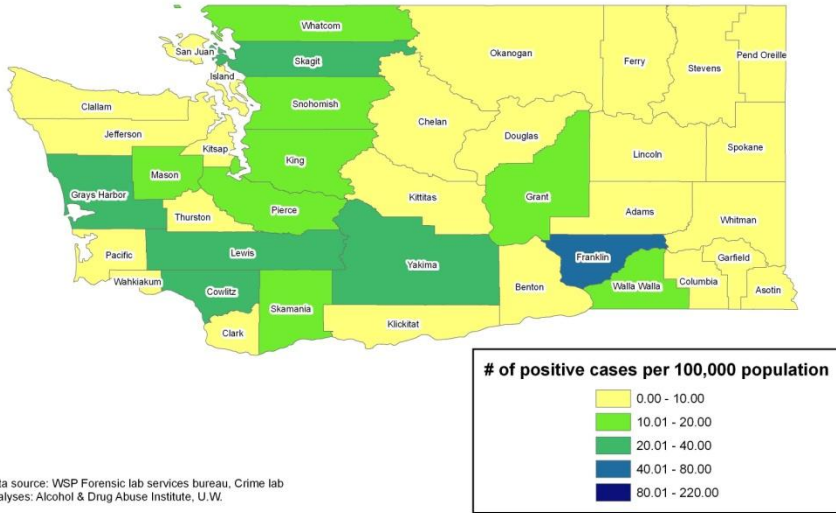
Rx Opiates Detected in Police Evidence, 2009



Data source: WSP Forensic lab services bureau, Crime lab
Analyses: Alcohol & Drug Abuse Institute, U.W.

County	2000 Count	2009 Count	2009 Rate
Grays Harbor	8	76	105.9
Lincoln	0	10	97.6
Kittitas	0	36	91.1
Clallam	1	63	88.2
Whitman	0	37	86.7
Mason	2	47	81.0
Lewis	1	60	80.3
Chelan	2	58	80.1
Pend Oreille	1	8	61.8
Pacific	0	13	61.1
Cowlitz	3	62	60.8
Stevens	3	24	56.7
Jefferson	0	16	53.9
Grant	2	46	52.2
Whatcom	10	100	49.9
Skagit	2	56	46.8
Franklin	0	35	45.2
Walla Walla	1	24	40.6
Adams	1	7	39.5
Kitsap	1	82	34.0
Okanogan	1	13	32.1
Klickitat	0	6	29.2
Clark	5	112	25.9
Benton	4	42	25.0
Columbia	0	1	24.8
Snohomish	18	153	22.0
Island	2	17	21.0
King	32	352	18.4
Yakima	2	36	15.1
Spokane	10	66	14.1
Thurston	2	24	9.6
Pierce	11	75	9.4
Asotin	0	2	9.3
Skamania	3	1	9.2
Douglas	0	3	8.0
Ferry	0	0	0.0
Garfield	1	0	0.0
San Juan	0	0	0.0
Wahkiakum	0	0	0.0
Total	132	1775	26.6

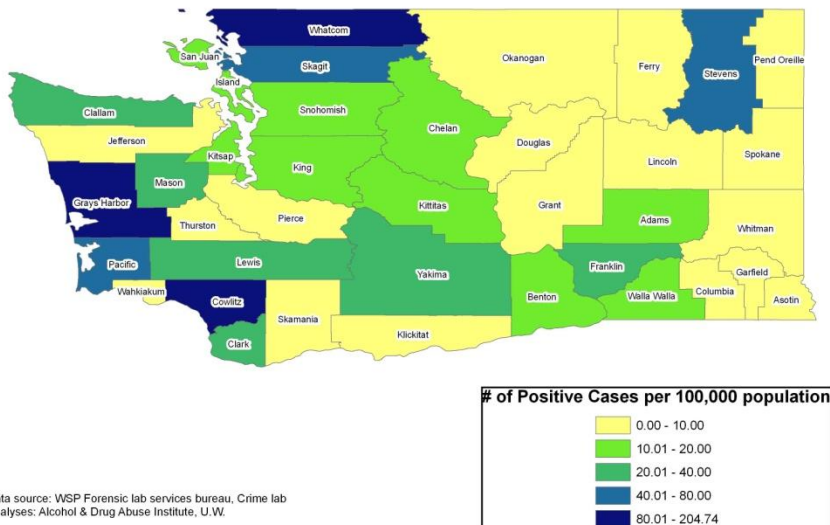
Heroin Detected in Police Evidence, 2000



Data source: WSP Forensic lab services bureau, Crime lab
Analyses: Alcohol & Drug Abuse Institute, U.W.

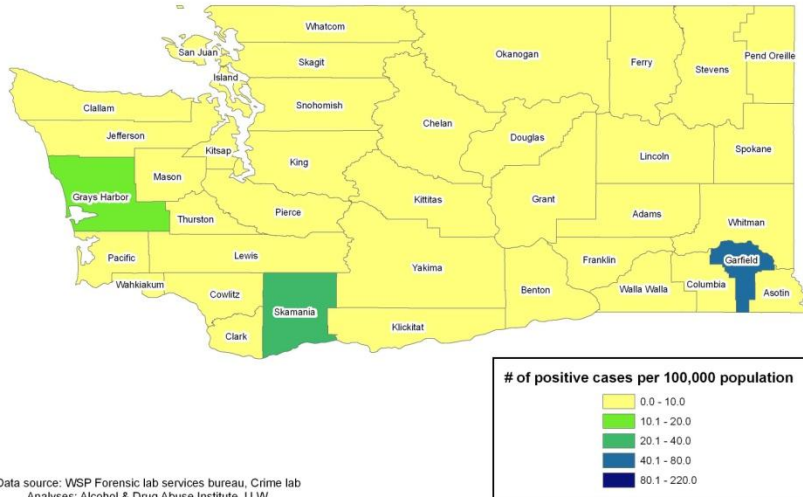
County	2000	2009	2009 Rate
	Count	Count	
Grays Harbor	22	147	204.74
Cowlitz	37	143	140.24
Whatcom	24	237	118.24
Skagit	24	90	75.29
Stevens	0	29	68.50
Pacific	0	14	65.81
Lewis	18	28	37.46
Clark	25	125	28.94
Franklin	24	22	28.44
Clallam	6	20	28.01
Mason	5	15	25.85
Yakima	59	49	20.50
Benton	11	30	17.83
Adams	0	3	16.92
Kitsap	6	36	14.95
San Juan	1	2	12.92
Snohomish	84	89	12.81
Kittitas	2	5	12.65
King	189	225	11.74
Island	4	9	11.10
Chelan	0	8	11.05
Walla Walla	6	6	10.16
Thurston	7	25	9.96
Whitman	2	3	7.03
Spokane	38	30	6.40
Pierce	73	42	5.27
Klickitat	1	1	4.87
Grant	8	4	4.54
Jefferson	0	1	3.37
Douglas	1	1	2.66
Asotin	2	0	0.00
Columbia	0	0	0.00
Ferry	0	0	0.00
Garfield	0	0	0.00
Lincoln	0	0	0.00
Okanogan	0	0	0.00
Pend Oreille	0	0	0.00
Skamania	1	0	0.00
Wahkiakum	0	0	0.00
Total	690	1443	21.65

Heroin Detected in Police Evidence, 2009



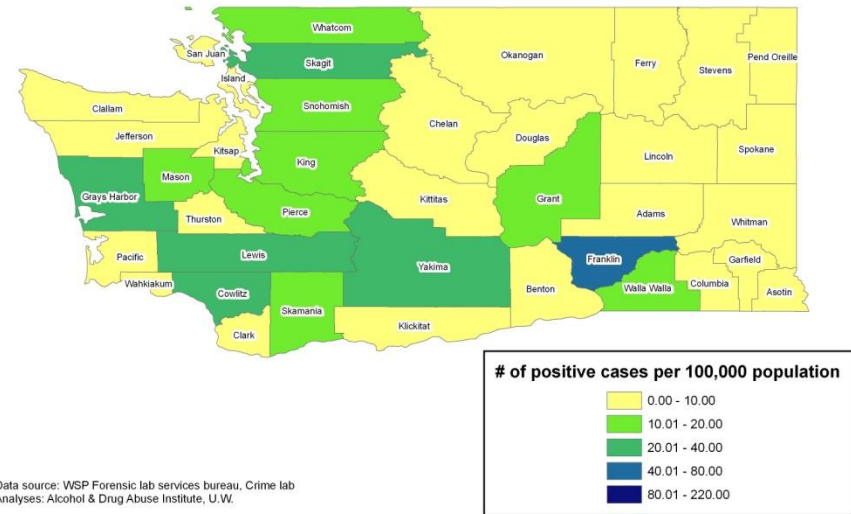
Data source: WSP Forensic lab services bureau, Crime lab
Analyses: Alcohol & Drug Abuse Institute, U.W.

Rx Opiates Detected in Police Evidence, 2000



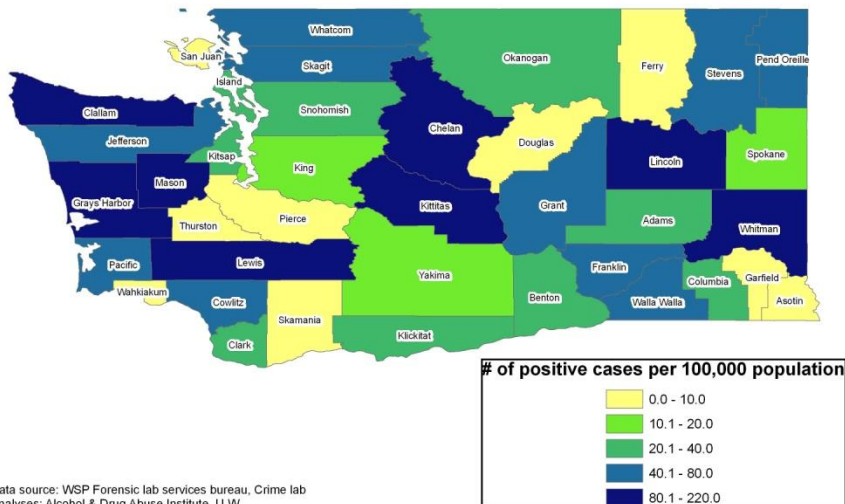
Data source: WSP Forensic lab services bureau, Crime lab
Analyses: Alcohol & Drug Abuse Institute, U.W.

Heroin Detected in Police Evidence, 2000



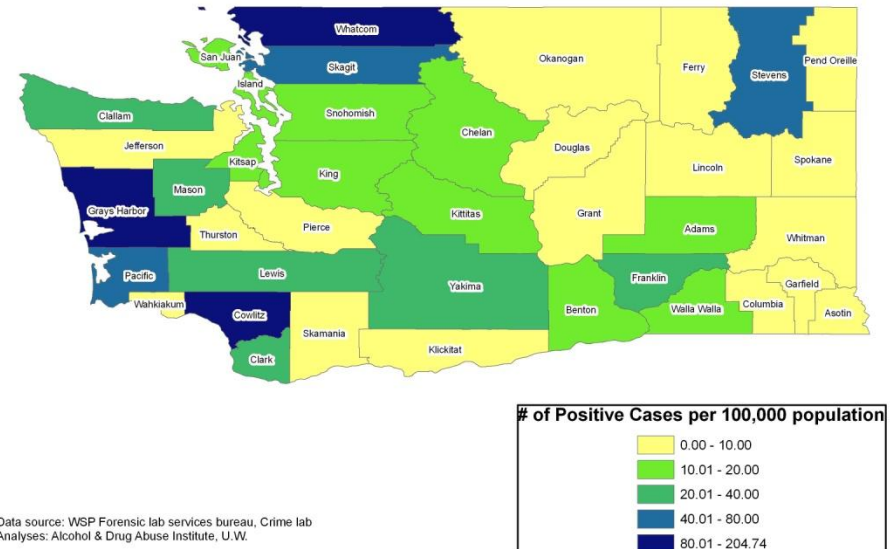
Data source: WSP Forensic lab services bureau, Crime lab
Analyses: Alcohol & Drug Abuse Institute, U.W.

Rx Opiates Detected in Police Evidence, 2009



Data source: WSP Forensic lab services bureau, Crime lab
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Heroin Detected in Police Evidence, 2009



Data source: WSP Forensic lab services bureau, Crime lab
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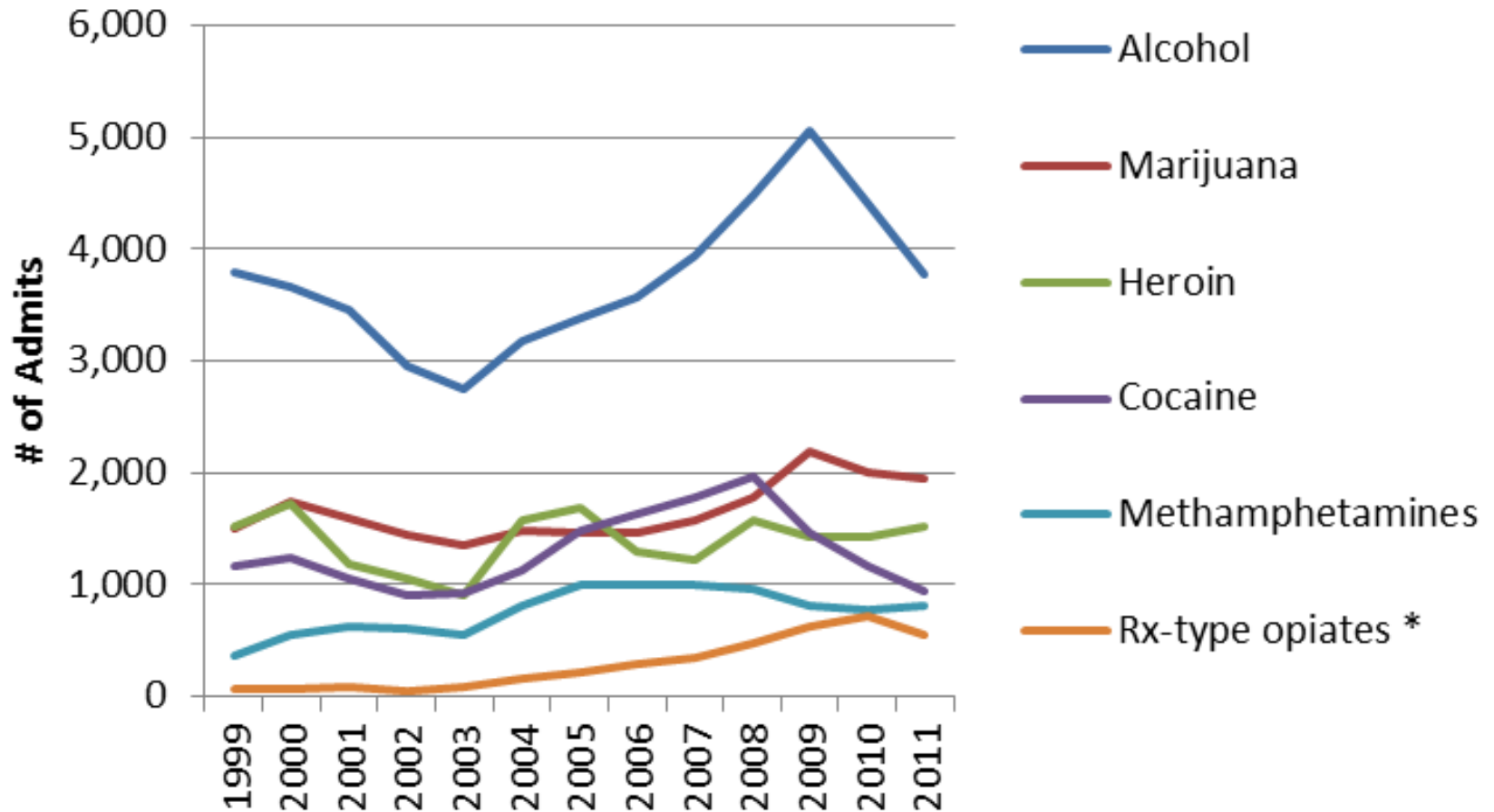
Treatment admissions data

Generally a lag of several years between initiating drug use and entering drug treatment

Trends can be driven more by funding and availability than demand

Different data sources based on payment and modality

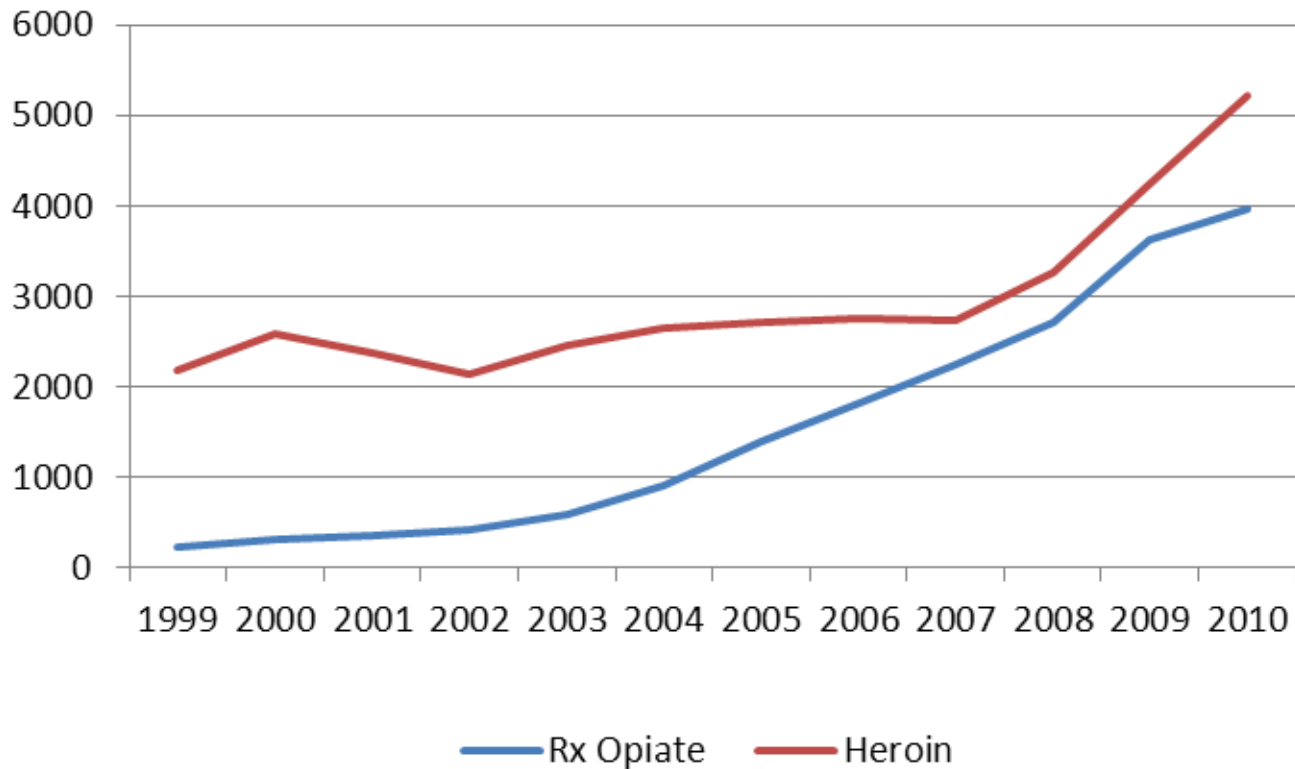
King County Treatment Admissions, Primary Drug, Public Pay



- Source: DBHR TARGET
- All treatment modalities (except only a small % of Suboxone as captured by OutPatient)
- King County Residents

Treatment Admits, WA State excluding King County

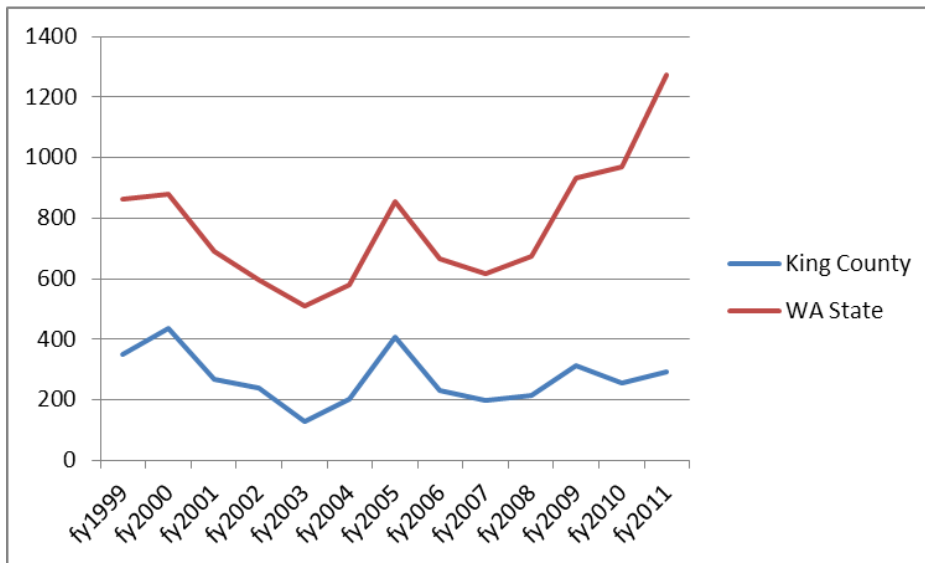
Outpatient, Inpatient, MMT, Public pay & Private pay MMT



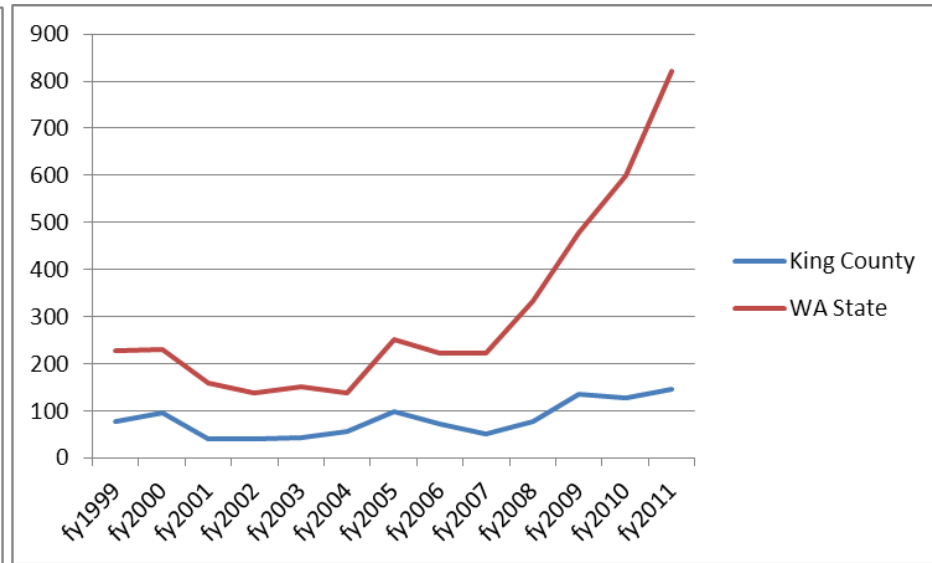
- At the population level rx opiate abuse appears to precede heroin abuse
- King county data show that 40% of heroin users were “hooked on” Rx opiates first

Heroin admissions, first time

All ages



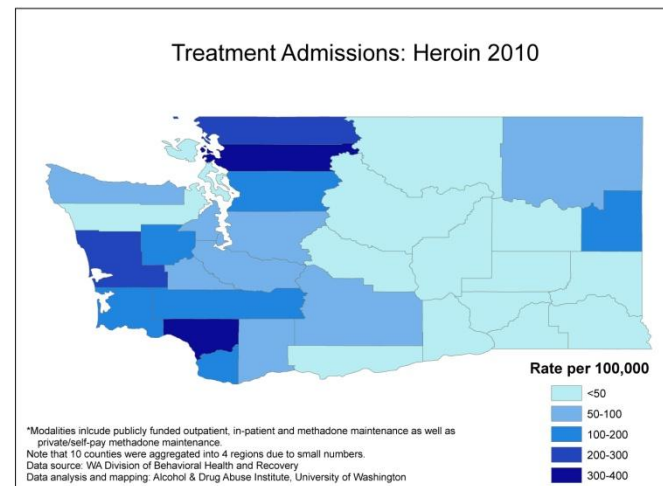
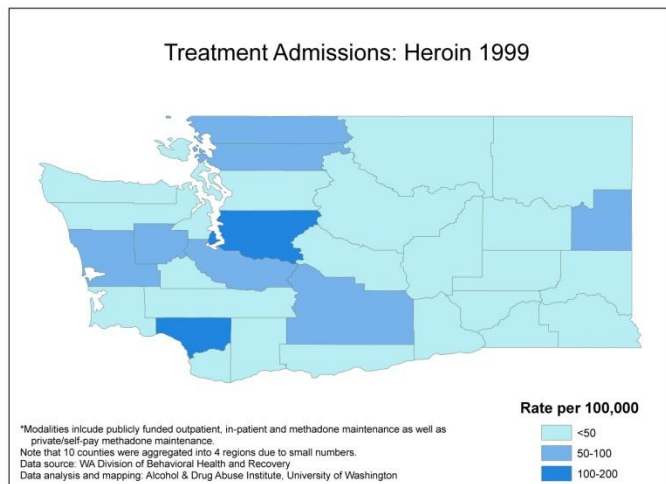
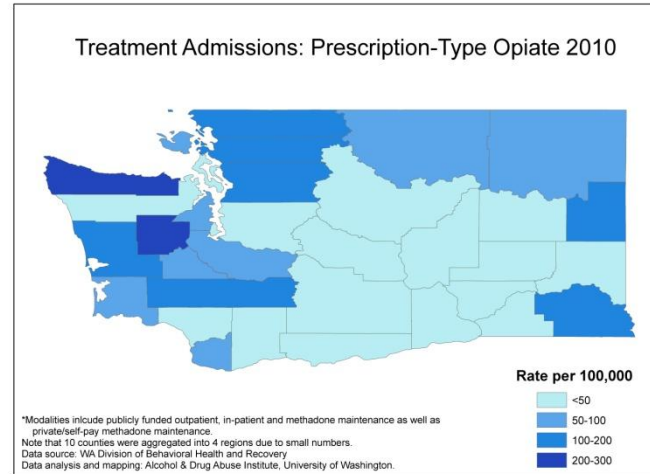
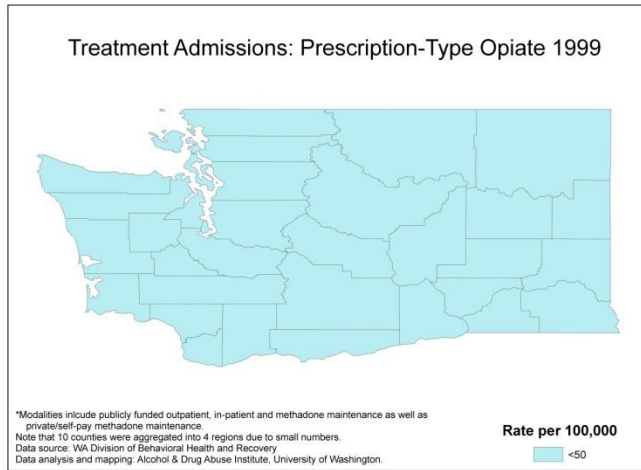
Ages 18-29



Publicly funded only data in figures

During March 2012 2,189 18-29 years olds in WA got Suboxone- opioid of choice unknown (PMP)

Opioid Addiction Treatment

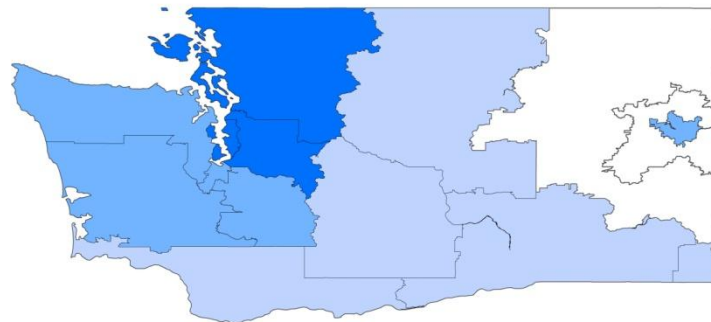


Buprenorphine Sales/Rx in WA

2005



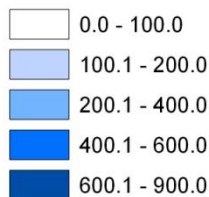
2008



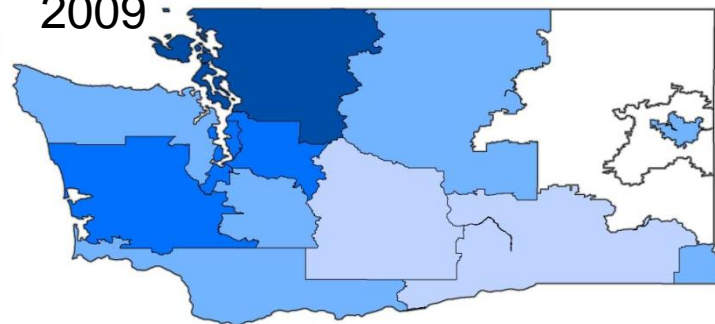
2006



Grams/100,000 population



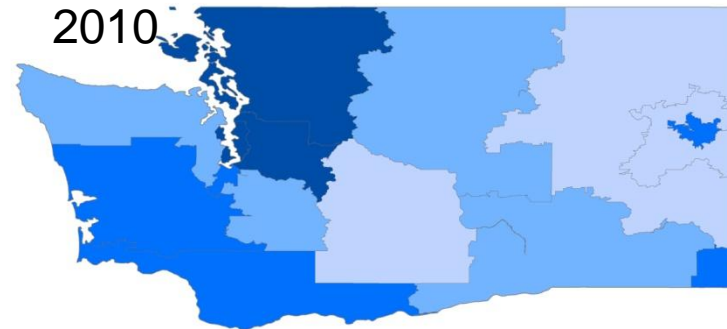
2009



2007



2010

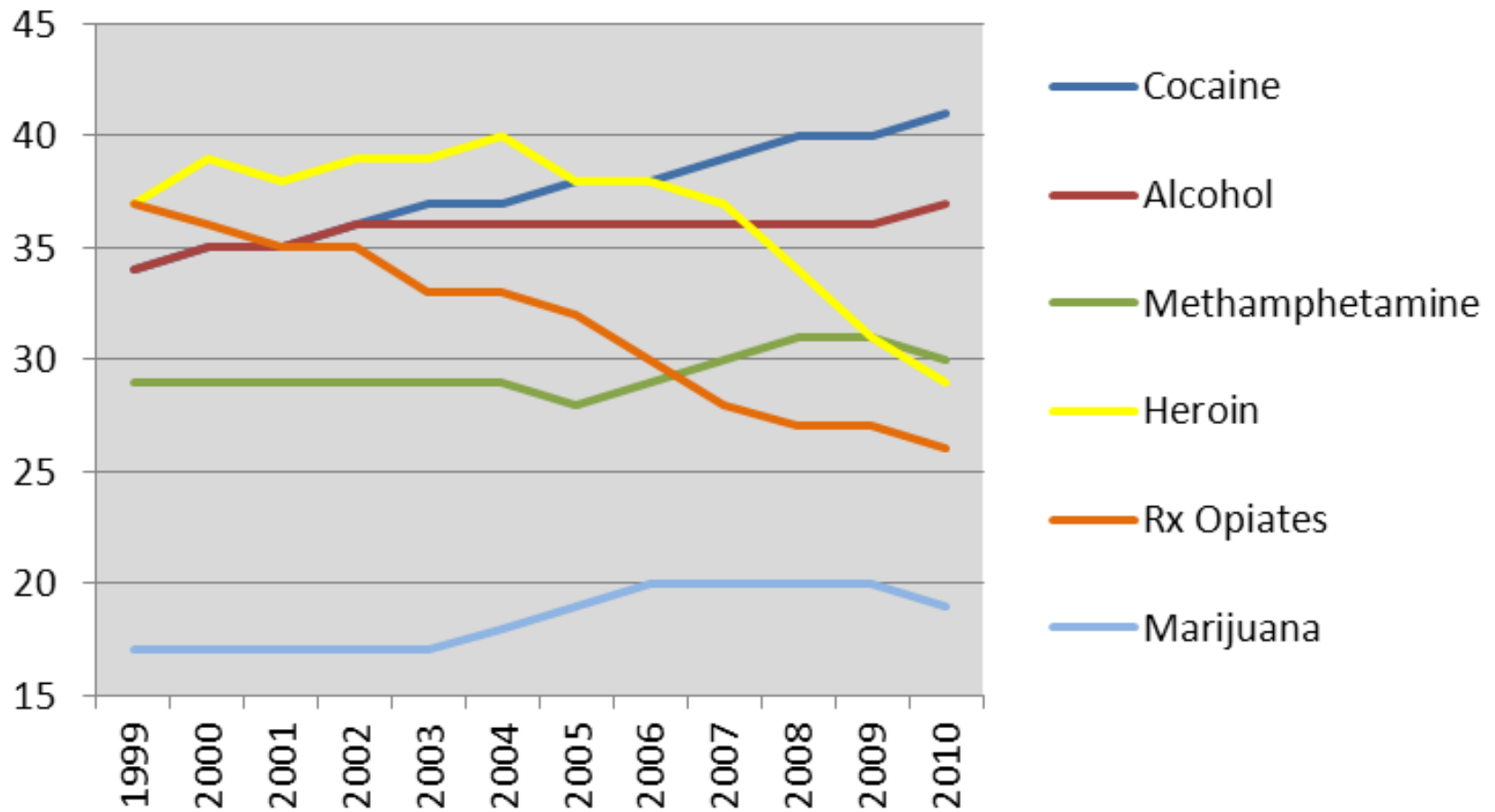


Opiate Substitution Treatment in WA

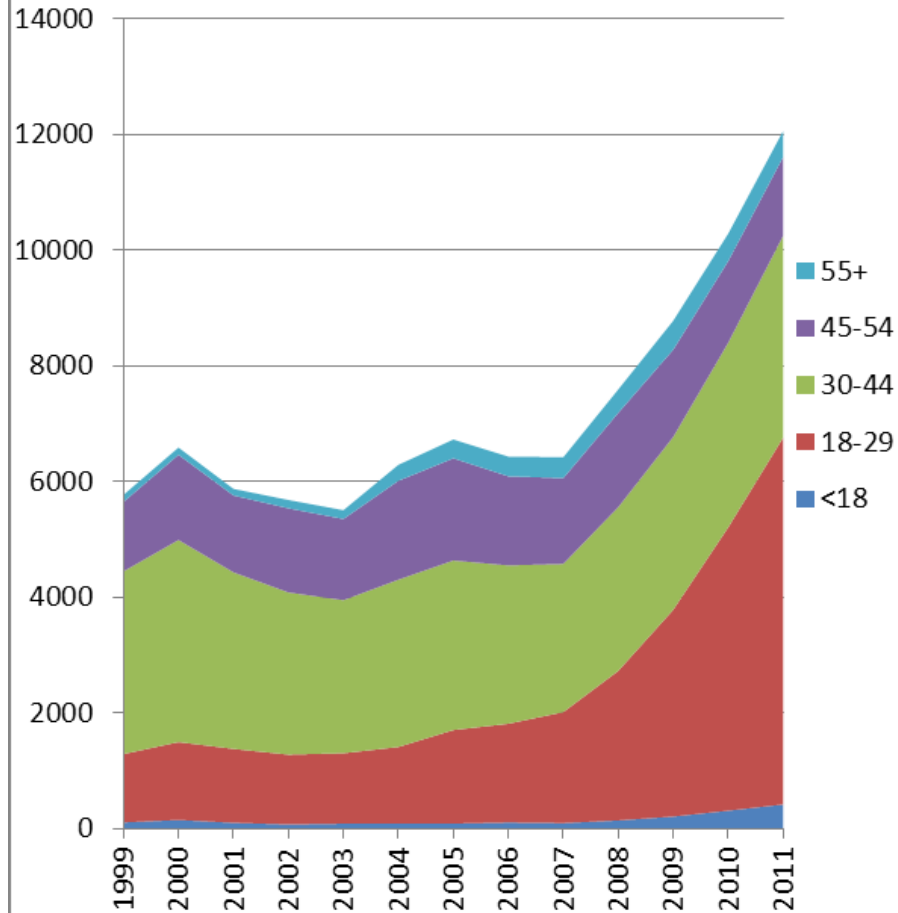
WA State	2005	2010
Methadone Annual Treatment Caseload	4,727	6,699
Estimated Suboxone Annual Treatment Slots	677	5,531
Estimated OST Total	5,404	12,230

Note this is a very conservative estimate of the number of *people* receiving Suboxone

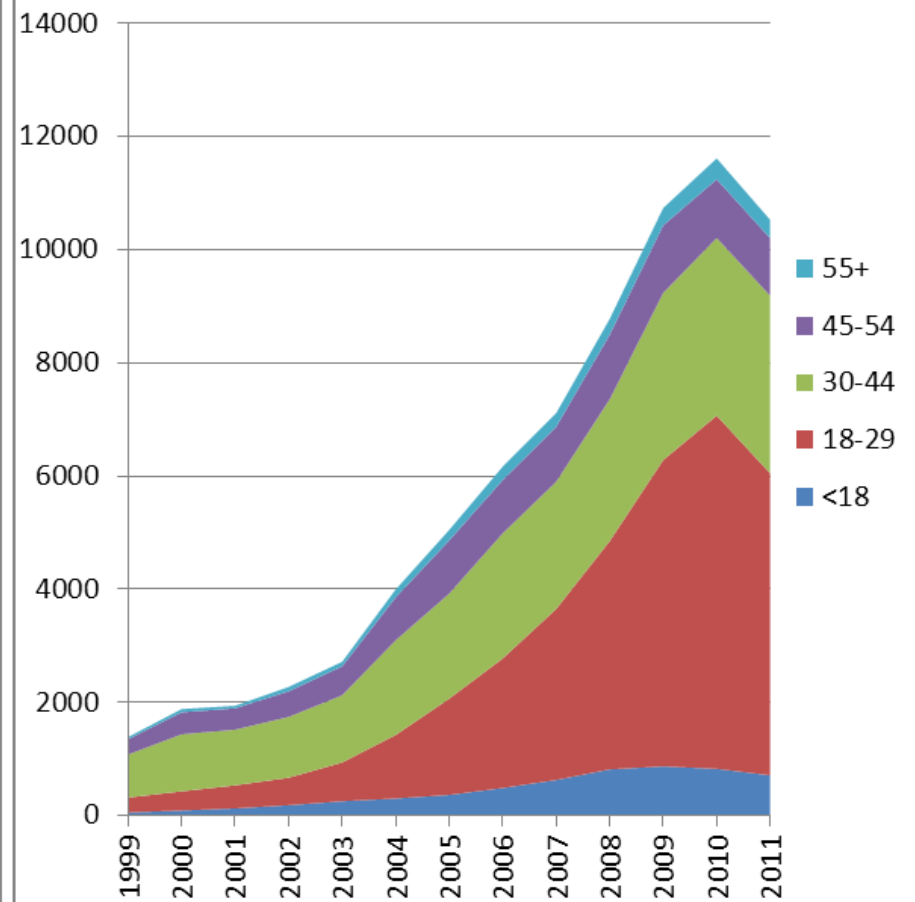
Age (median) at Treatment Entry WA State



Heroin use at treatment entry WA State



Rx opiate use at treatment entry WA State

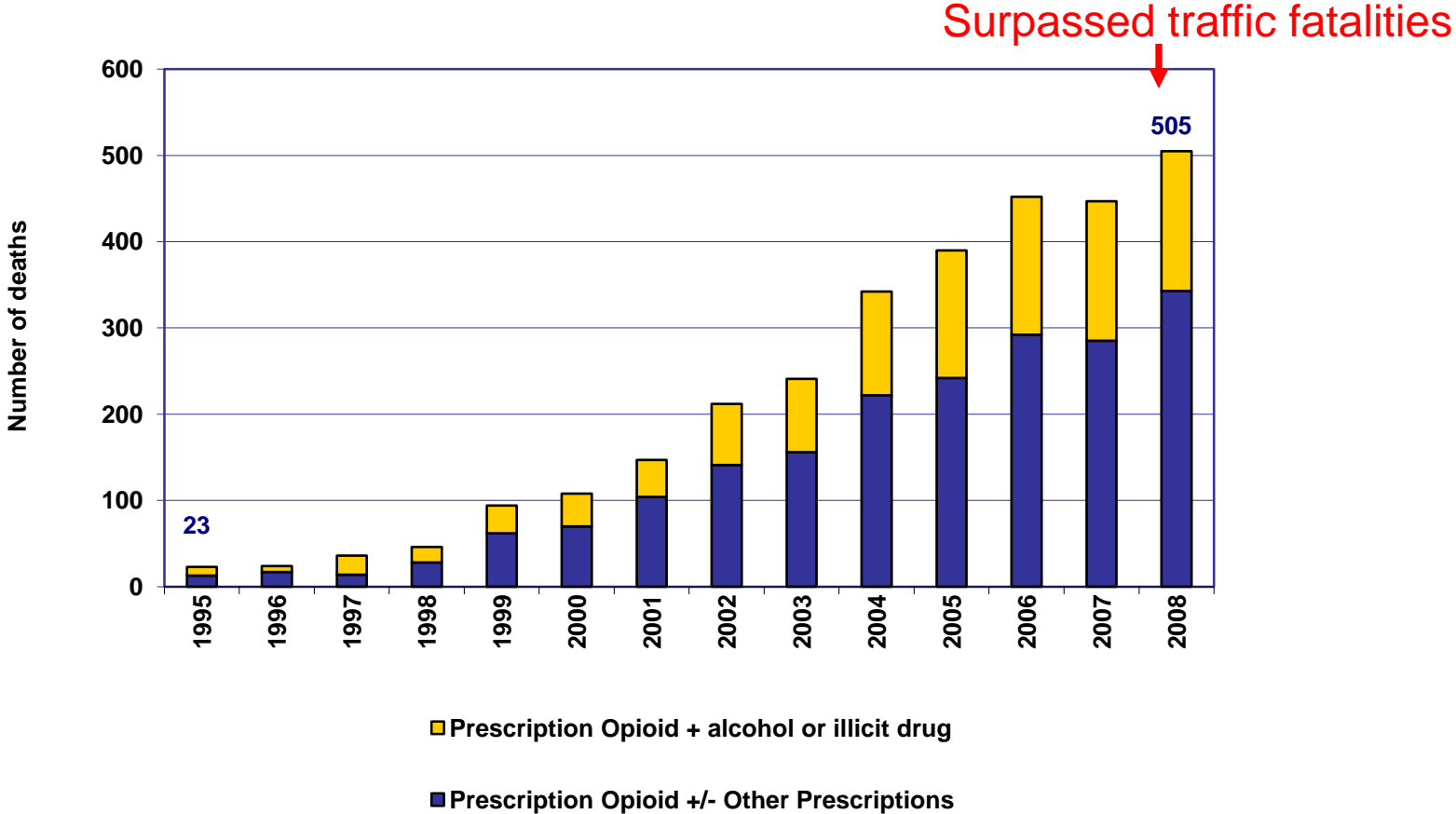


Source: TARGET

Number of Washington State Resident Unintentional Poisoning Deaths

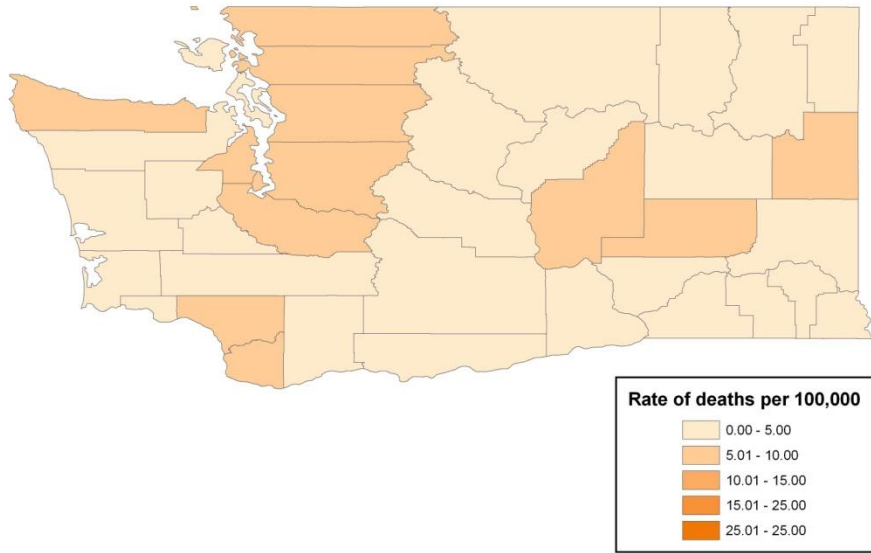
- Center for Health Statistics, Washington State Department of Health extracts data from death certificate
 - Lack of precision for heroin in chemical testing
 - Lack of specificity in reporting for heroin

Unintentional prescription opioid involved overdose deaths Washington 1995-2008

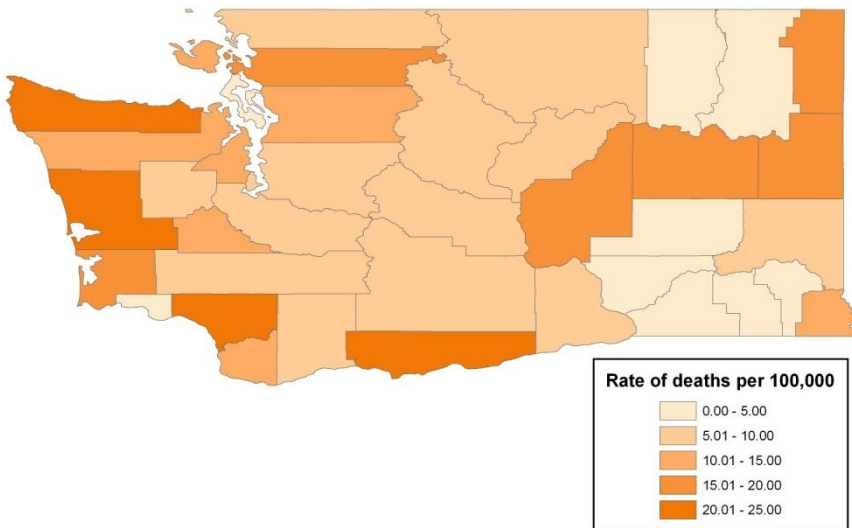


Source: Washington State Department of Health, Death Certificates, Jennifer Sabel, PhD

Unintentional deaths involving opioids (Heroin and/or Rx), 2000



Unintentional deaths involving opioids (Heroin and/or Rx), 2009

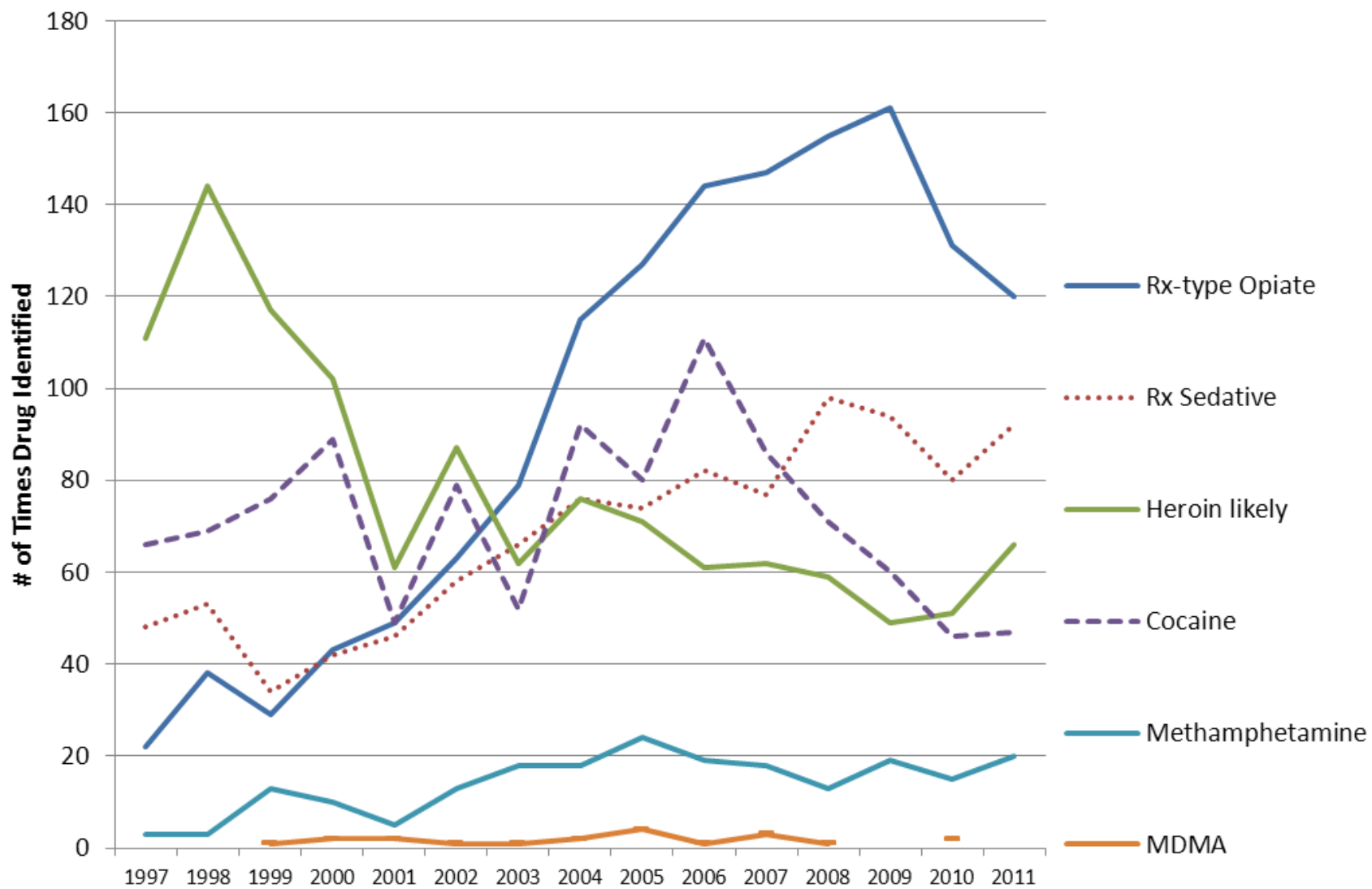


County	2000	2009	
	Count	County	2009 Rate
Klickitat	0	5	24.33
Clallam	5	16	22.40
Cowlitz	7	22	21.58
Grays Harbor	2	15	20.89
Lincoln	0	2	19.52
Grant	5	17	19.30
Pacific	0	4	18.80
Skagit	6	19	15.90
Pend Oreille	0	2	15.45
Spokane	28	71	15.15
Asotin	0	3	14.00
Snohomish	35	92	13.25
San Juan	0	2	12.92
Thurston	6	28	11.16
Clark	20	47	10.88
Kitsap	14	26	10.79
Jefferson	0	3	10.11
Pierce	60	79	9.91
Okanogan	0	4	9.86
Whitman	2	4	9.37
King	124	178	9.29
Skamania	0	1	9.18
Whatcom	9	18	8.98
Benton	3	15	8.91
Mason	1	5	8.62
Chelan	0	6	8.29
Lewis	1	6	8.03
Douglas	1	3	7.99
Yakima	9	14	5.86
Kittitas	1	2	5.06
Island	2	4	4.93
Stevens	1	2	4.72
Franklin	1	1	1.29
Adams	1	0	0.00
Columbia	0	0	0.00
Ferry	0	0	0.00
Garfield	0	0	0.00
Wahkiakum	0	0	0.00
Walla Walla	0	0	0.00
Statewide	344	722	10.83

King County Drug Caused Deaths



King County Drug Caused Deaths



Sources of acquisition for pharmaceutical opioids in overdose deaths

- Pilot study, death investigation
- King County
- 2005
- Unintentional Pharmaceutical Opioid involved overdose deaths

Drug Type	No.	%
Prescription-type opioids* (more than one possible)	30	100%
Methadone	16	53%
Oxycodone	11	37%
Morphine, Pharmaceutical†	7	23%
Hydrocodone	4	14%
Tramadol	1	4%
Propoxyphene	1	4%
Other drugs effecting the central nervous system§	30	100%
Heroin, cocaine and/or methamphetamine	20	67%
<i>Heroin†</i>	12	40%
<i>Cocaine</i>	15	50%
<i>Methamphetamine</i>	3	10%
Psychotherapeutic drugs with depressant effects¶	10	33%
Alcohol	5	17%

* Not including codeine or hydromorphone when morphine was present as these may be metabolites

† Based upon the death investigation and toxicological testing. Restricted to those deaths where the origin of morphine could be established.

Excluding caffeine, nicotine, cannabinoids and selective serotonin re-uptake inhibitors

¶ Alprazolam, diazepam, nordiazepam, amitriptyline, nortriptyline, trazodone, carisoprodol or cyclobenzaprine

Source of Pharmaceutical Opioid

All Cases

	No.	%
Total with a known source**	25	83%
Decedent's Prescription(s) alone	11	37%
Decedent's Prescription and Street	1	3%
Decedent's Prescription & Unknown	1	3%
In Opioid Dependence Treatment (ODT)	4	13%
Street	5	17%
Friend/family	1	3%
Friend/family & Unknown	2	7%
Unknown source	5	17%
TOTAL	30	100%

PMP should help in future

Recent data findings summary

- Rx-type opiate deaths decreased in 2009-11
- Heroin deaths in King County remain low at 66 in 2011, compared to 144 in 1998
 - Signs of increase in 2011.
- Low purity heroin (2-5%) may be keeping heroin OD's low for now
- Morphine, Oxycodone and Methadone prescribing have leveled off
- Buprenorphine treatment/Rx increasing
- Treatment data foreshadow a continuing cohort of young opioid dependent people at substantial risk for OD and in need of treatment as they age

Interventions

Provider and Family education about health and medication beliefs

- Messages:
 - Parents are in charge of medicines
 - Medicine can be dangerous if...
 - Medications can help with medical problem, but rarely “fix” it....
- Provide lock box

Preventing/Intervening in overdose

- OD prevention, recognition and intervention education for high risk persons and their family/partners
- Provision of opiate antidote (naloxone)
- New Good Samaritan Law

www.stopoverdose.org

Prevention Strategies

- **Education for Medical Care Professionals**
 - **Educational Pilot: Guidelines for Opioid dosing for chronic, non-cancer pain**
<http://www.agencymeddirectors.wa.gov/guidelines.asp>
 - **Pain (opioid) management guidelines HB 2876**
- **Clinical Interventions**
 - **Medicaid**
 - **Narcotic Review Program**
 - **Patient Review and Coordination Program**

Clinical system interventions

- Care Coordination through Emergency Rooms
- Prescription Monitoring Program –began early 2012
- Incentivize physicians to use system
- New legislation will require 90% of E.D. docs to register
- Screen for drug misuse in primary care and EDs, refer to treatment (SBIRT)
- Provide practice guidelines for primary care
- Chronic disease management models, clinical pathways...
- Opioid addiction treatment in primary care-Suboxone
- Project ROAM, Rural Opioid Addiction Management

Helping rural providers treat opioid addiction and chronic pain: Project ROAM's first year

Roger Rosenblatt MD, MPH
Department of Family Medicine
University of Washington

24th NW Regional Rural Health Conference
Spokane, WA, March 31st, 2011

Medical students alerted us to the enormity of the problem

The students told us that the most negative parts of rural primary care were:

- Chronic pain patients
- Prescription drug (opiate) abuse and drug seeking

Introducing Project ROAM: Rural Opiate Addiction Management

- A part of Rural Mental Health Substance Abuse Treatment grant PI = John Roll Ph.D. at WSU; LSDF funded
- Family Medicine at UW took on the clinical intervention
- Started with training rural clinicians to use buprenorphine/ Suboxone, an oral medication that is safe to use in rural office practice
- Although Suboxone has been available to treat addiction for eight years, only 37 rural docs in Washington had DEA waiver in 2010

Components of Project ROAM

- Provide DEA “waiver” courses – training physicians, other clinicians, and practice staff.
- Offer designated mentors selected from the waiver course instructors.
- Provide outreach to practices initiating buprenorphine Rx, including attention to work flow, billing, counseling, etc.
- Partner with project ECHO to provide tele-consultation for patient management, CME, & creation of a virtual community.

Physician “Testimonials” about Suboxone

“This restores lives – sometimes literally...”

“I think it is the answer to the constraints and unavailability of a methadone program and allows people to get on with their lives.”

“It should be a part of every physician’s formulary.”

Narcan distribution

- Non-governmental organizations distributing take-home naloxone for several years. Locations on www.stopoverdose.org
- Public Health- Seattle & King County began distributing in February in 2012
 - Recruitment via needle exchange
 - OD prevention and intervention training at Belltown PHSKC service office
 - Narcan prescribing and dispensing by PH pharmacist in Belltown building
 - CDTA PHSKC-BOP
 -
- Police training **video** recently released based on survey findings
 - View online at www.stopoverdose.org

Seattle Medic One, Serious Opiate Overdoses

in sample of 2011 cases*

Serious opiate overdoses (n=268)**				
		n	mean	median
Age		258	41.1	40
				(range 18-90)
		n	#	%
Gender		267		
	Male		194	72.7
	Female		73	27.2
Type of opiate involved		268		
	Not specified		40	14.9%
	Heroin only		100	37.3%
	Rx opiates only		112	41.8%
	Heroin + Rx opiates		16	6.0%
Other abusable drug involved***		268		
	Suspected/med list/history		110	41.0%
	Not documented		158	59.0%
Narcan administered (paramedic)		267		
	Yes		145	54.3%
	No		122	45.7%
Narcan administered (bystander)		268		
	Yes		2	0.7%
	Not documented		264	98.5%

*Cases pulled for Feb/Apr/Jun/Aug/Oct/Dec 2011

**Cases initially screened by Medic 1 staff, final case determination ADAI, UW staff Caleb Banta-Green

***One or more of the following is involved: alcohol, cocaine, amphetamine, benzodiazepine, muscle relaxer

45 serious opiate overdoses per month responded to by SFD in 2011*

- Approximately 1:1
Heroin:Rx Opiate

32 cardiac arrest cases per month responded to by SFD in 2010**

*268 serious opiate overdoses per our chart abstraction for *6 months* in 2011

** "384 out of hospital cardiac arrest cases treated by SFD in 2010"

Narcan possible next steps

- Community requests for take-home Narcan
 - Parents
 - Heroin and Rx users and their friends and family
 - Primary care & ED providers
- Physicians prescribe Narcan with opiate Rx's
 - E.g. methadone induction, high dose...
- Discussions begun with pharmacies about
 - Pharmacists *prescribing* naloxone
 - *Stocking* take-home narcan
- Overdose training development project beginning- online, in-person and webinar
- Drug treatment clinics, jails could train and distribute
- Medicaid coverage approved, protocols in process

More information

Overdose and Naloxone information

– www.stopoverdose.org

Alcohol and Drug Abuse Institute

– adai.washington.edu

WA Dept of Health

– <http://tinyurl.com/DOH-TAD>