

Opioid Prescribing: “Houston We Have a Problem”

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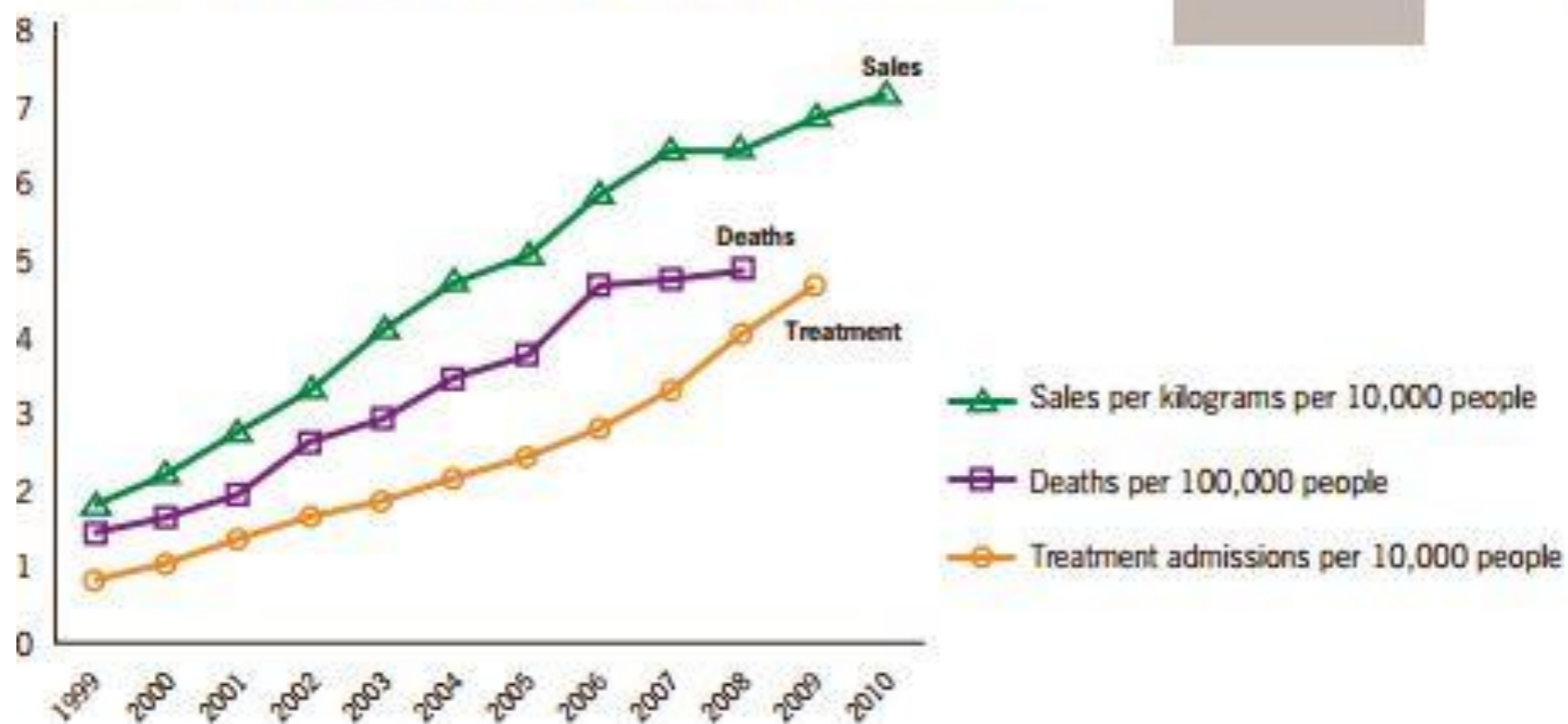


Regional Support Program



Rates re: Prescription Painkillers

Rates of prescription painkiller sales, deaths and substance abuse treatment admissions (1999-2010)



SOURCES: National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009

LEARNING OBJECTIVES

By the end of the session participants will have:

- increased awareness of the history of opiate use
- increased knowledge of best practices for prescribing opiates for chronic non cancer pain
- a better understanding of the results of poor prescribing practice.

The Great Opium Dilemma

How did we get here?

- **Papaver Somniferum**
- Grown in Iraq for centuries
- Sticky seed pods contained a substance called opium, “the joy drug”.

Widespread growth all over the Middle East, North Africa and into India.

Extract was used for pain control and Arab physicians accurately described addiction.

- In the late 1600s, Arabian ships started to import opium to China, where opium smoking rapidly became an epidemic.

First Opium War

- China declared opium illegal for non medicinal use in 1729
BUT
- Most of the opium flowed from British ruled India and was a serious cash crop.
- Chinese imports like porcelain and tea were much sought after in Britain, but Britain had little which China wanted.

Balancing the trade books

With an abundance of opium for sale, the British decided that importing opium into China even against the wishes of the Chinese government made good economic sense. Huge profits were made. Addiction to opium spiraled out of control and China descended into the most disastrous drug misery in history.

Guns and drugs

- China battled with the Royal Navy to try to defend its shores and the war on drugs became the war of guns, with the Chinese junks, predictably, being no match for that well known Ruler of the Waves
- 1842 - war ended in Treaty of Nanjing
- 1856 - second opium war ended forcing China to open its ports and borders to Western commerce.
- By this time, the opium trade and smoking was established and thriving. China eventually ceded Hong Kong to Britain on 99 year lease.

Other Breakthroughs

- 1804 Frederick Serteuner isolated the active ingredient of opium naming it “morpheus” after Morpheus, the god of dreams.
- 1853 - hypodermic syringe and needle were designed and perfected just in time for pain control management in the American Civil War.
- But there was poor understanding of how morphine should be used, so many injured men became addicted. Addiction became known as “The Soldiers’ Disease.”

International Opiate Use

- Opiates were widely used in N. America and Europe, without controls, and recommended for all sorts of ailments: eg Mrs. Winslow's Soothing Syrup for teething infants.
- In Europe, opium eaters were considered harmless. Opium was used by many well known writers and artists like Elizabeth Barrett Browning, Thomas de Quincey and others.

Opiates recommended for all sorts of ailments

THE NEW YORK MEDICAL JOURNAL 39

BAYER
PHARMACEUTICAL
PRODUCTS

Send for samples
and Literature to

ASPIRIN
*The substitute for
the salicylates*

HEROIN
*The sedative for
coughs*

LYCETOL
The uric acid solvent

SALOPHEN
*The antirheumatic and
antineuralgic*

ARISTOL
CRESOYL CARE
PROTARGOL
QUINALGEN
PIPERAZINE
GUALACOL CARE
EUROPHEN
HEROIN-HYDROCHLORIDE
FERRO-SODIUM
HEMICRANIN
SULFONAL
IODOTHYRINE
SODIUM
SYCOSE
PHENACETIN
TRONAL

FARBENFABRIKEN OF
ELBERFELD CO.

40 STONE STREET,
NEW YORK.

An Early 20th-Century Ad Featuring Drugs from Bayer, Including Heroin for Coughs and Aspirin.

Alcohol use

- Considered to be much more troublesome and much more widespread.
- Physicians frequently prescribed morphine for alcoholics as it was less financially ruinous and made patients much less prone to violence.

Opiate use in America

- Huge increase especially OTC preparations used by respectable suburban housewives
- But legal intravenous use was increasing
- Sears carried syringe kits in its catalogue
- No one complained

Heroin

- 1874 - diacetylmorphine synthesized, highly lipophilic, acted rapidly on the brain.
- 1897 - Bayer, under Heinrich Dreyer, produced both acetylsalicylic acid and diacetylmorphine.
- ASA did not look hopeful, but heroin as it was now called was marketed to TB patients as an effective cough suppressant, both as a syrup and pastilles.
- Heroin use exploded courtesy of OTC products.

America's first war on drugs

- Harrison act 1914 at first glance an attempt to deal with orderly prescribing of narcotics. Led to a lot of confusion and contradictory interpretations.
- 1922 - the Berman case. Legal only to prescribe narcotics for legitimate medical purposes. Addiction was a crime and not eligible for treatment. Created two classes of criminals, narcotic addicts and physicians who prescribed for them, 23,000 of whom ended up in jail.

An unwinnable ideological war

- Mainstream medicine began running scared, physicians stopped prescribing narcotics for anything, and as nature abhors a vacuum, the illicit drug market was born and thrives to this day, with a brief hiatus in the early 1940s thanks to the inability of traffickers to import their goods.

“The American narcotics problem is an artificial tragedy with real victims”

“Just say no”

- 1980s Nancy Reagon declared the “just say no” program, one of the silliest and most uninformed suggestions ever uttered.
- Legislation made methadone and other treatment programs virtually impossible

CHRONIC NON CANCER PAIN

- Highly prevalent, substantial medical care burden
- Opioids increasingly prescribed
- Opioids associated with potential harms for both patient and society
- Addiction, abuse, overdose, diversion potential and crime

PRESCRIPTIN DRUG ABUSE

- Several million North Americans estimated to abuse prescription drugs
- Prescription drugs cause more drug overdose deaths than cocaine and heroin combined. Often associated with multiple opioids and other illicit substances.
- Many people believe that abusing prescription drugs is safer than abusing “street” drugs
- Oxycodone is the most commonly diverted and abused controlled pharmaceutical in N. America

PRESCRIPTION DRUG ABUSE

- Most prescription opiates used by young people come from their parents medicine cabinet.
- Unexpected mortality from opiate overdose secondary to “smarty parties”, choosing pills at random gathered from medicine cabinets and placed in a bowl for kids to dip into.
- Opiate OD had become second commonest cause of death of USA men from 35 – 54 by 2006
- Deaths from Rx opiates in Ontario have gone up by several hundred percent over last 6 years

- Goals of treatment for CNCP
- Reduction of suffering
- Correction of sleep disturbance
- Reduction of depression and anxiety
- RESTORATION OF FUNCTION**
- Elimination of unnecessary dependence on medications

CNCP

- All drugs of abuse and all opiate medications produce behavioural reinforcement.

SO...

- Look for Red Flags
- Keeping physicians and patients safe

RED FLAGS IN PRESCRIBING PHYSICIANS

- Often uses opioids as first or second line treatment
- No documentation of pain scales or function pre/post opioid therapy
- Chaotic charting
- Filling prescriptions early, faxing prescriptions
- No attempt to get objective evidence of patient drug/medication use

PHYSICIANS

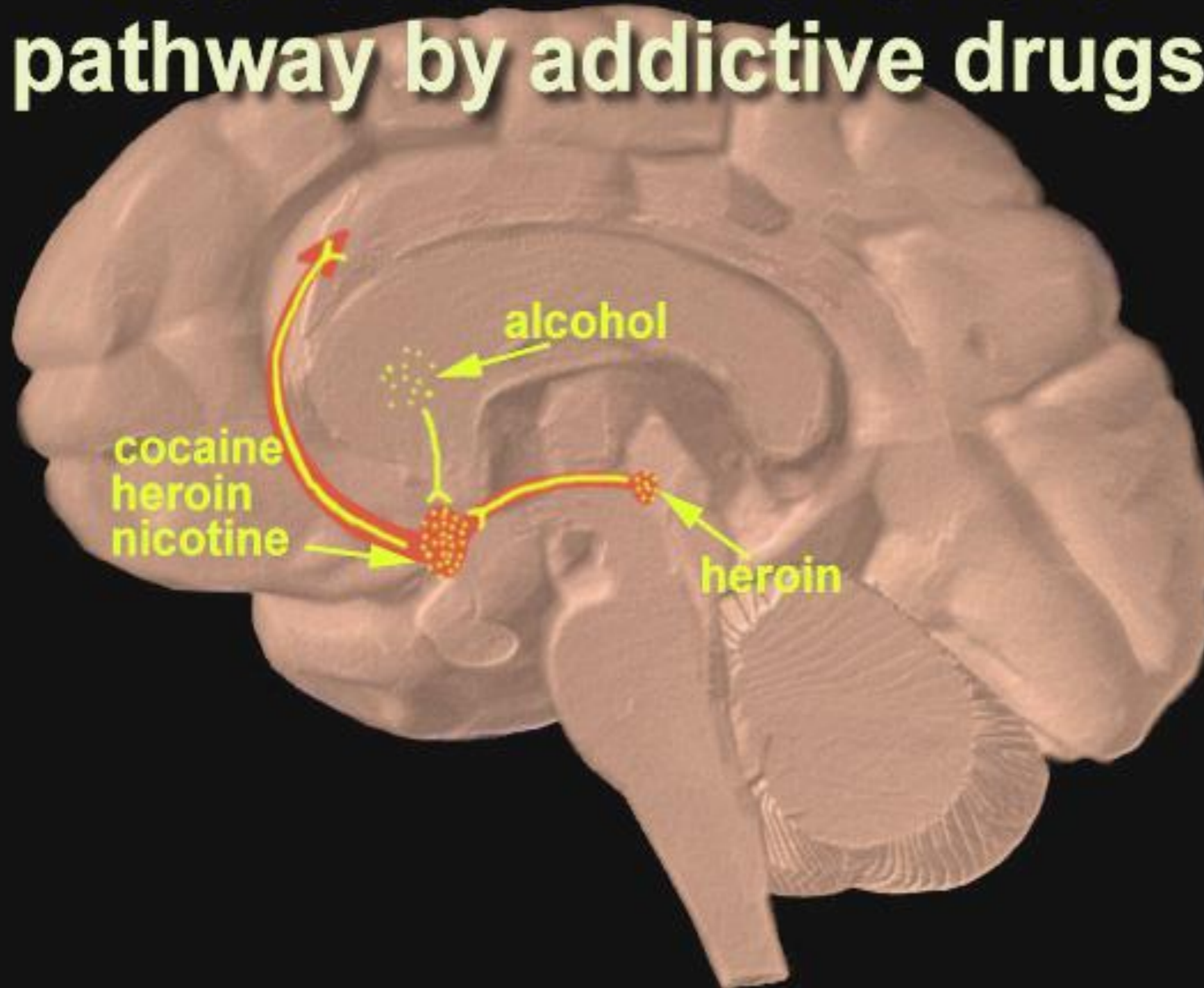
- Continues to prescribe opioids despite evidence of abuse, or no evidence of improved function
- Can't say "NO", "needs to be needed"
- "My patients are special" "I know them really well."
- Active Substance Use Disorder in physician

UNDERSTANDING ADDICTION

- Why is this illness so devastating?
- Mood altering drugs lock on to and overwhelm the pleasure/reward centre located between the frontal lobes and in front of the mid brain or diencephalon.
- MADs are so powerful that other sources of pleasure – food, friendship, sex – become of little or no importance. Leads to the “3 Cs of addiction”.

Why do they keep doing it'?

Activation of the reward pathway by addictive drugs



RED FLAGS IN PATIENTS

- 3 Cs of Addiction (CNCP)

- # 1: Loss of Control.

- Lost/stolen Rx
- Early refills
- Multiple doctors & pharmacies
- Missed appointments
- Appears at clinic without appt. and in distress
- Multiple ER visits
- Requests for faxed Rx

3 Cs of Addiction or ?Chronic Pain (CNCP)

•# 2 COMPULSIVE USE

- Life taken over by need to get and use opioids
- Failure to comply with non opioid components of Rx plan, exercise, sleep hygiene etc
- Continues to demand bigger doses of opioid while complaining that pain is no better
- Insistence on instant release opioids
- Using opioid to control anger, elevate mood, or calm anxiety, especially with history of emotional trauma
- Willingness to persist with opioids in the face of their own and their physician's growing discomfort.

•# 3 Use despite troublesome Consequences

- Over sedation, intoxication or impairment
- Decreased level of function
- Sexual dysfunction
- Depression or other mood disorders
- Overdose
- Diversion – legal consequences
- Social consequences – work, family and friends

THIS ALL LOOKS LIKE A HUGE CLINICAL CHALLENGE.

- It is – and there are ways to do it well and keep ourselves and our patients safe.
- How do we diminish the risk of developing or worsening a Substance Use Disorder (SUD) when prescribing opioids?
- How do we help our patients deal successfully with CNCP?

Dr. Doug Gourley - see handout

- **UNIVERSAL PRECAUTIONS IN PAIN
MANAGEMENT**

BEST PRACTICE FOR OPIOID PRESCRIBING

1. Complete hx, PE and differential diagnoses including an assessment of function
2. Risk assessment SUD and mental health disorders
3. Medication review and initial UDS
4. Treatment agreement between physician & patient
5. Informed consent
6. Goal setting
7. Trial of opioid
8. Post trial functional assessment
9. Regular assessment of the 4 “A”s of pain medicine
10. DOCUMENT, DOCUMENT, DOCUMENT

Prescription Pad and Pen

Pre-Prescription Considerations:

What should we do before we apply pen to prescription pad?

1. Complete assessment:

Medical

- Psychosocial history
- Psychiatric status
- PAIN diagnosis
 - Is there a definable pain generator?
 - What are the objective findings?
 - Subjective complaints are not alone satisfactory

PRE PRESCRIPTION CONSIDERATIONS Cont'd

2. Risk assessment

- Aberrant drug related behaviours occur in up to 50% of patients being prescribed opioids for CNCP
- Risk stratification to screen for actual and potential opioid abuse **MUST** be performed pre prescription
 - strongest predictor of misuse/abuse is a personal or FH of alcohol or drug abuse
 - previous addiction treatment
- **HAVE YOU EVER BEEN ON METHADONE MAINTENANCE?**

1 QUESTION:

2. Risk assessment

- **HAVE YOU OR A FAMILY MEMBER **EVER** HAD A PROBLEM WITH ALCOHOL OR OTHER DRUGS?**

| Item | Mark each box that applies | Item score if female | Item score if male |
|---|----------------------------|----------------------|--------------------|
| 1. Family history of substance abuse: | | | |
| Alcohol | <input type="radio"/> | 1 | 3 |
| Illegal drugs | <input type="radio"/> | 2 | 3 |
| Prescription drugs | <input type="radio"/> | 4 | 4 |
| 2. Personal history of substance abuse: | | | |
| Alcohol | <input type="radio"/> | 3 | 3 |
| Illegal drugs | <input type="radio"/> | 4 | 4 |
| Prescription drugs | <input type="radio"/> | 5 | 5 |
| 3. Age (mark box if 16-45) | <input type="radio"/> | 1 | 1 |
| 4. History of preadolescent sexual abuse | <input type="radio"/> | 3 | 0 |
| 5. Psychological disease | | | |
| Attention-deficit disorder, obsessive-compulsive disorder, bipolar disorder, schizophrenia | <input type="radio"/> | 2 | 2 |
| Depression | <input type="radio"/> | 1 | 1 |
| Total | | — | — |
| Total Score Risk Category: Low Risk: 0 to 3 Moderate Risk: 4 to 7 High Risk: 8 and above | | | |

FIGURE. Opioid Risk Tool.

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RISK ASSESSMENT Ctd

- The 5 As – Assessment Questions
 - **A**ctivities of daily living, work, self care, mobility, leisure, hobbies, sleep etc.
 - **A**nalgesia from previous treatment
 - **A**dverse effects
 - **A**ffect – underlying mental health disorder
 - **A**berrant drug related behaviours

And as well...

- Accurate medication log?
- Ask relatives and friends – collateral information

Pre-Prescription Considerations Cont'd

3. Medication review

- What has been tried before?
 - What medications is the patient on now?
 - What OTC preparations is he/she taking?
 - What other therapies have been tried?
 - What sort of compliance?
-
- Initial urine drug screen of vital importance for understanding of patients current medication and drug use.

Pre-Prescription Considerations Cont'd

BENZODIAZEPINES

3. Medication review

- An alarming number of patients with CNCP are on benzos.
- Commonly prescribed with opioids and a frequent concern for the Prescription Review Programs
- Combination of benzos & opioids increase sedation, chance of overdose and diminished function
- Very addictive both physically and psychologically
- Put patients at risk for a neuroleptic event – rare but potentially deadly
- Tapering can be done in primary care – Ashton manual

Pre-Prescription Considerations Cont'd

4. Treatment agreement – ALWAYS

- One opioid prescriber
- One pharmacy
- Regular UDS – preferably point of care (POC)
- Pharmanet consent
- No early refills
- Regular appts. and no faxed Rx

The protocol must be consistent for all patients who are on prescribed opioids

Pre-Prescription Considerations Cont'd

5. Goal setting

- Must be realistic
- Increase in function
- Decrease in pain

BUT...

- The best we can achieve is around 25 – 30% pain reduction

THERE ARE NO “PAIN KILLERS”

Pre-Prescription Considerations Cont'd

6. Informed consent

- “You may become dependent”
- Explain potential:
 - benefits
 - adverse effects
 - medical complications
 - risks

We have an obligation and a duty of care to ensure that the patient understands that this is not “prescribing as usual”.

Pre-Prescription Considerations Cont'd

7. Trial of opioid

- Opioid therapy is ALWAYS a trial
- Regular reassessment
- IF TREATING PAIN, FUNCTION IMPROVES
- IF FEEDING ADDICTION, FUNCTION DIMINISHES

8. Allow enough time for a realistic trial, and if post trial assessment does not establish efficacy, best to taper off opioids or harm may well ensue.

INITIATING A TRIAL OF OPIOIDS

Basic principles

Opiate selection: weak or strong?

Weak opiates:

- codeine (10% population can't metabolise codeine)
- tramadol + or- acetaminophen

Strong opiates:

- Morphine
- Oxycodone: about 1.5 times morphine equivalent
- Hydromorphone: about 6 times morphine equivalent
- Fentanyl: 25 mcgs about equal to 45 mgs morphine/24 hrs
- Methadone: THERE ARE NO RELIABLE EQUIANALGESIC TABLETS

DOSE MANAGEMENT

- Initial dose: START LOW, REASSESS REGULARLY
- If patient has already been on opiates, calculate total daily dose morphine equivalent, divide by two and start long acting morphine
- If patient has not been on opiates, start on small dose of long acting morphine and monitor results
- Titrate up every few days until some pain relief and return to improved function
- Breakthrough doses of short acting morphine may be required in the first instance
- BUT PATIENTS WHO PREFER SHORT ACTING OPIATES ARE WAVING A VERY BRIGHT RED FLAG – MUCH MORE BUZZ ON SA OPIATES
- Calculate total daily dose and add into long acting medication

OPTIMAL DOSE

- That dose which relieves pain by 25 - 30% and allows patient to achieve an improvement in function. Increase in dose yields no more benefit
- Take into account side effects which affect most patients: gut, endocrine function, sweating, sedation etc.
- ALWAYS WATCH FOR MISUSE DURING TRIAL

WATCHFUL DOSE

Daily dose exceeding 200 mgs morphine or equivalent:

- Hydromorphone 40 mgs
- Oxycodone 140 mgs

If this dose is exceeded,

- Reassess the pain problem
- Reassess patient's response to opioids
- Reassess risk of misuse

- Monitor more frequently

- DOCUMENT RATIONALE FOR EXCEEDING WATCHFUL DOSE

PROBLEMS ASSOCIATED WITH HIGH DOSE OPIATES

- Multiple side effects
 - Hyperalgesia – increased dosing makes pain worse
 - Likelihood of diversion
 - Likelihood of patient adverse outcome with associated physician adverse outcome:
-
- CPSBC
 - Coroners services
 - Legal consequences

IF THE WATCHFUL DOSE ISN'T HELPING, HIGHER DOSES ARE NOT LIKELY TO IMPROVE THE SITUATION

WHAT ABOUT UDS?

Point of care testing now available and reliable for:

- Opiates
- Benzos
- Cocaine
- Amphetamines
- Oxycodone
- Methadone

WHAT ABOUT UDS?

- MSP will pay you for doing POC testing in your office.
- Logistics of purchasing POC for office an issue or not?

UDS Ctd

How to organise UDS?

- Must be respectful and consistent
- Supervised – divest of bags, heavy coats, hoodies etc
- Pre labelled container
- Given at once to lab tech or MOA
- Temperature strip applied
- Either POC or sent out to lab
- **RANDOM TESTS**

More likely to catch patients who are using other substances. Patients are called and asked to present for a UDS within 24 hours. If no show, consequences which could include daily pickup from pharmacy, etc.

UDS LIMITATIONS

- Useful for assessing what the patient is taking
- What is NOT in the urine is just as important as what is present
- Hydromorphone is variably detected
- Fentanyl is NOT detected – requires a specific EIA
- Some benzos are variably detected, the EIA used is the antibody for diazepam, clonazepam may not show up
- Sertraline and citalopram can give a false positive for benzos
- Tests do not tell how much is being used or the frequency of use

DRUG DETECTION TIME IN URINE

| | |
|----------------------|------------|
| Amphetamines | 48 hours |
| Benzos irregular use | 3 days |
| regular use | 30 days |
| Cocaine metabolites | 2 – 4 days |
| THC single use | 3 days |
| long term use | 30 + days |
| Opioids | 2 – 3 days |
| Methadone | 2 – 4 days |

POOR PRESCRIBING PRACTICE

- Inadequate pain control
- Reinforcement of addictions disorders
- Diverted opiates
- Increased crime
- Increased prostitution
- Increased disease spread
- Increased drug overdoses and deaths
- Increased use of ERs

All of these unintended consequences are huge social disasters, personal and family tragedies and an economic nightmare.

CLINICAL CHALLENGE

- How can we diminish the risk of developing or worsening a substance use disorder when prescribing opioids?
- How can we prevent these unintended consequences?
- How do we best ensure that our opioid prescriptions are not diverted?

THE “DOCTOR FACTOR”

AMA: mechanisms by which physicians become involved in prescription diversion – “the 4 Ds + 1”

1. Dated
 2. Duped
 3. Disabled
 4. Dishonest
- + DEFIANT

- The latest and largely iatrogenic drug epidemic in N.America
- Responsible for huge morbidity and frequent mortality
- Billion dollar industry
- Most diverted opiates are prescribed for cancer pain
- Low income families can double or treble their incomes

- Going rates depend on distance from big city.
- Also depends on how heavy the local prescribers are. “Easy” prescribers are known on the street.
- New addict in town? Asks who the “worst” doctor is as this is the most likely source of goodies.

Nanaimo per pill:

| | |
|------------------|-----------------|
| Oxycontin 80 mgs | \$40.00 |
| other strengths | \$10.00 – 20.00 |
| Dilaudid | \$10.00 |
| | \$5.00 |
| | \$2.00 |

Diverted prescription opiates etc

| | |
|---------------------------------------|--|
| Percocet | \$5.00 – 10.00 |
| Codeine | \$4.00 |
| Tylenol No. 3 | \$1.00 per pill |
| Benzos | \$0.25 – 1.00 |
| • clonazepam 0.5mgs = diazepam 10 mgs | |
| • zopiclone 7.5 mgs = diazepam 10 mgs | |
| Morphine | \$10.00/ml |
| Seroquel | \$2.00 (used to ease the crash from cocaine) |

REALITY CHECK

Physicians struggle with:

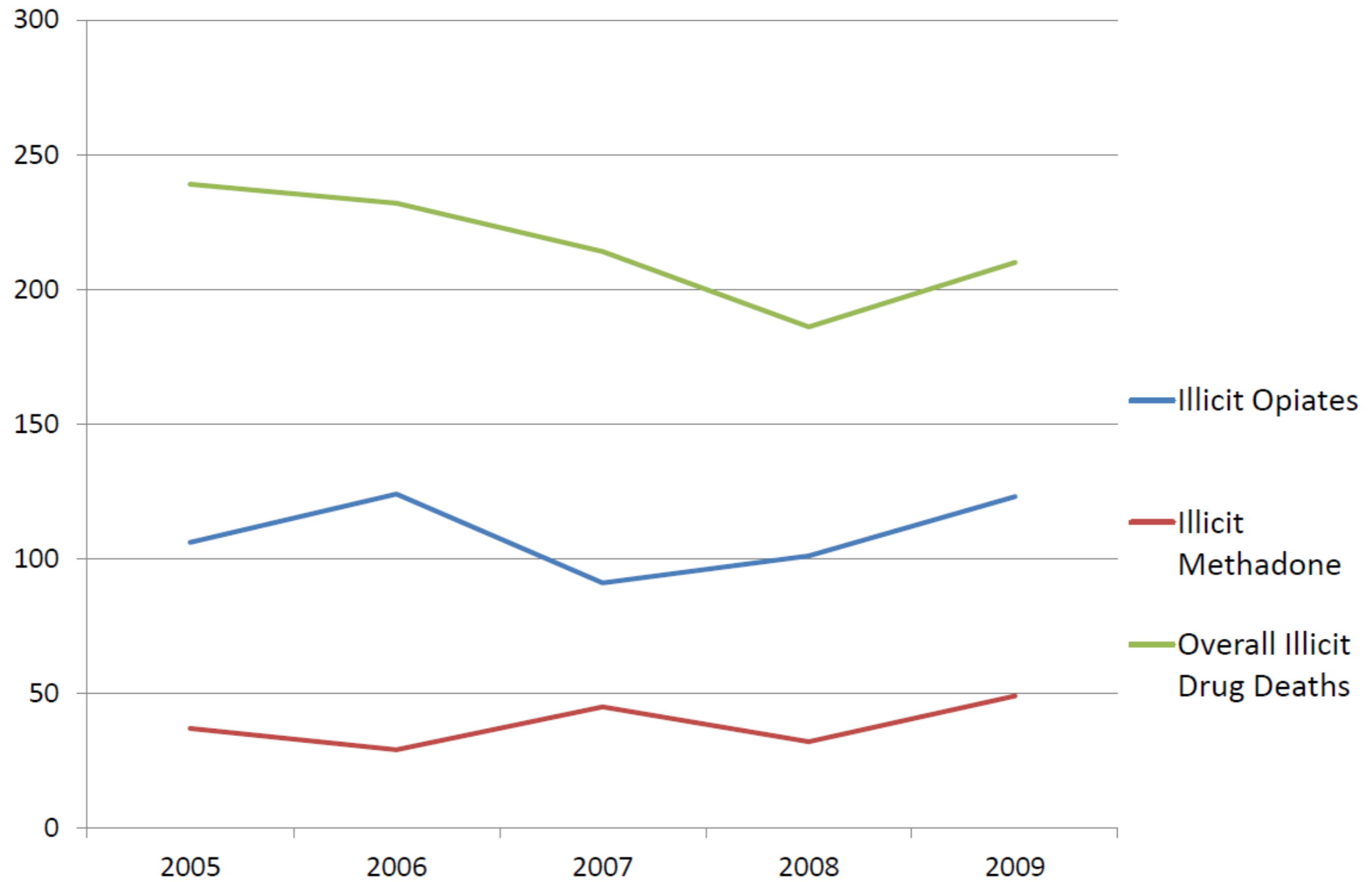
- serious time constraints
- not enough teaching about and understanding of addictions medicine
- little information about chronic pain
- fear of treating chronic pain
- fear of not treating chronic pain
- very few avenues of referral: pain clinics are few and far between and have long waiting lists
- serious pressure from Big Pharma to prescribe opiates
- serious pressure from skilled and manipulative pts.

BC'S PROGRAMS

What's different in BC?

- Pharmanet – patients MUST give consent to review profile
- Duplicate prescription pads for all opiates
- CPS responsible for the methadone maintenance program which is the most tightly controlled MMP in Canada
- Methadone and suboxone very useful for addictions management and chronic pain management
- Methadone prescribers can help with both addictions and chronic pain. All methadone prescribers have to do a training program and get an exemption from the Bureau of Dangerous Drugs in Ottawa in order to prescribe

Illicit Drug Death Trends, 2005 - 2009



Regional Comparisons

Illicit Drug Deaths and Death Rate by Region, 2009

| Region | Deaths | Rate per 100,000 pl |
|--------------|-----------|---------------------|
| Fraser | 55 | 3.5 |
| Interior | 32 | 4.4 |
| Island | 32 | 4.3 |
| Metro | 78 | 7.0 |
| Northern | 7 | 2.5 |
| Total | 204 | 4.6 |

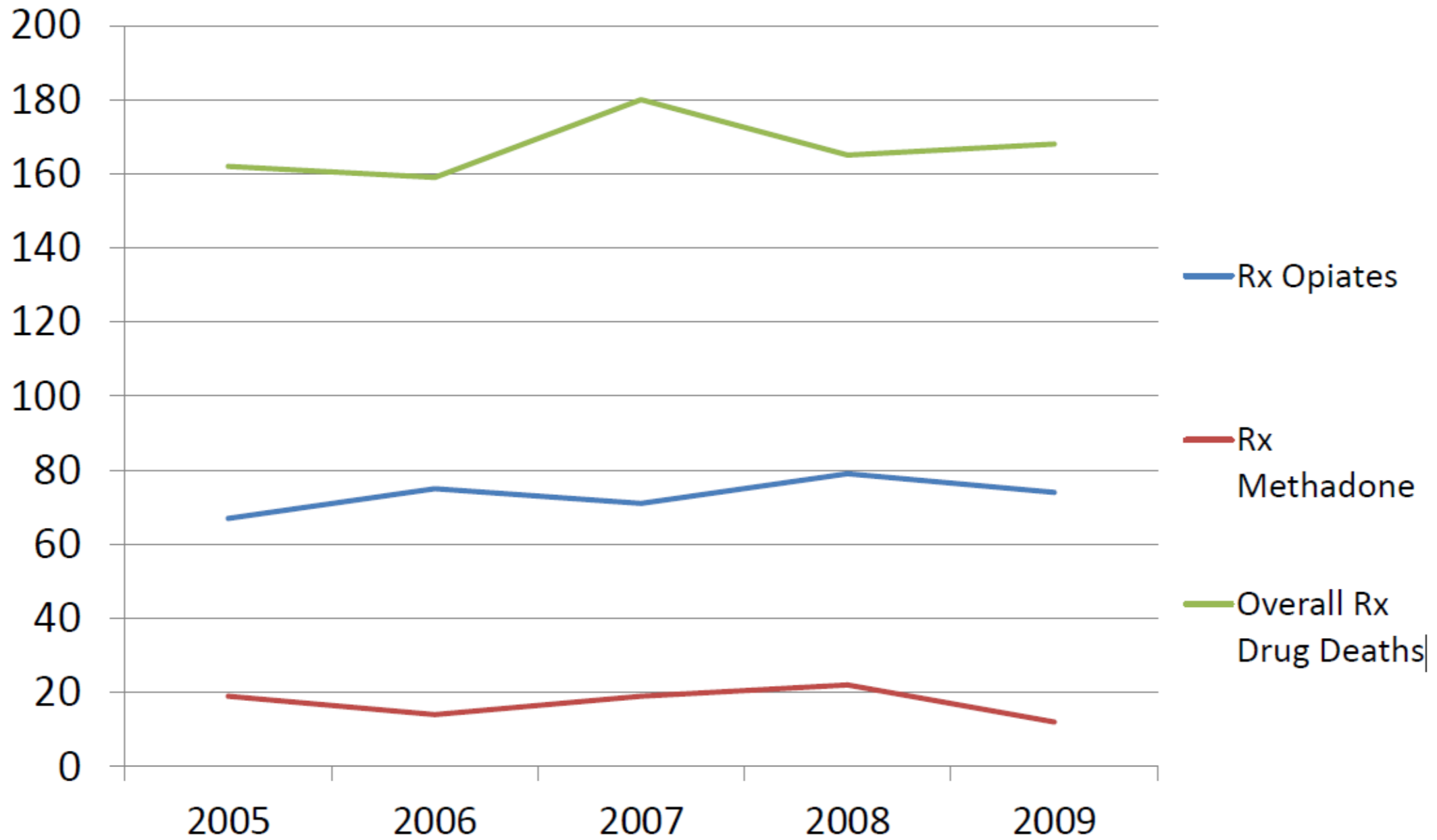
Prescription Opiates and Death Rate by Region, 2009

| Region | Deaths | Rate per 100,000 pl |
|-----------------|-----------|---------------------|
| Fraser | 20 | 1.3 |
| Interior | 22 | 3.0 |
| Island | 10 | 1.3 |
| Metro | 18 | 1.6 |
| Northern | 4 | 1.4 |
| Total | 74 | 1.7 |

Rx Opiate Deaths by Substance

| | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|---------------|-----------|-----------|-----------|------------|-----------|--------------|
| Codeine | 28 | 39 | 34 | 32 | 26 | 159 |
| Fentanyl | 4 | 5 | 4 | 2 | 5 | 20 |
| Hydromorphone | 6 | 11 | 13 | 9 | 11 | 50 |
| Meperidine | 1 | 3 | 3 | 1 | 2 | 10 |
| Morphine | 40 | 26 | 26 | 35 | 36 | 163 |
| Oxycodone | 8 | 6 | 7 | 21 | 18 | 60 |
| Total | 87 | 90 | 87 | 100 | 98 | 462 |

Rx Drug Death Trends, 2005 - 2009



| Methadone-related Deaths in BC, 2008 - 2010* | | | | |
|---|-----------|-----------|-----------|--------------|
| Death Classification | 2008 | 2009 | 2010 | Total |
| Accidental | 60 | 71 | 72 | 203 |
| Natural | 6 | 5 | 6 | 17 |
| Suicide | 3 | 1 | 4 | 8 |
| Undetermined | 5 | 1 | 4 | 10 |
| Total | 74 | 78 | 86 | 238 |

**Includes all cases where methadone was detected in toxicological testing, and was determined by the Coroner to be relevant to the death*

Overall Summary...

- While illicit drug deaths are declining in BC, this trend is not shown in the number of deaths attributed to prescription opiate medications
- Every year in BC, between 150-200 people die from an overdose of prescription opiate medications (excluding methadone)
 - A physician was the source of these medications
 - First do no harm
 - How can we contribute to reducing this number?

FINAL TIPS

- Negotiate a clear behavioural contract
- If a medication such as opiates is tried unsuccessfully – STOP!
- Never underestimate the healing power of an empathetic physician
- The patient **MUST** carry the responsibility
- Focus on function
- Recovery is an attitude
- If there are legal issues, big problem
- Victims never recover
- Early sustainable return to work is part of treatment
- If we do not have the expertise to work with patients who have CNCP, and have nothing effective to offer the patient, it's OK to say no and refer on

What is the problem here?

- Prescription opiates loosely managed?
- Poor opiate prescribing training for physicians?
- Methadone?
- Lack of access to treatment programs?
- Lack of access to less troublesome treatments such as Suboxone?

- None of the above?
- All of the above?

- Good questions!

Thank you!

If anyone has the answers, I'm listening...

Thanks to Dr. Karla Pederson, Chief Coroners Office, for the use of her statistics slides.