

The British Columbia Coroners Service: a perspective on prescription opiates

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British Columbia Coroners Service

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Outline

- Introduction to the BC Coroners Service
- Why examine prescription opiates?
- Prescription Opiate Overview
- Illicit Prescription Opiate Overview
- Prescription Methadone Overview
- Illicit Methadone Overview
- Summary

The British Columbia Coroners Service

- Provincially legislated mandate (*Coroners Act*)
- Investigation of all non-natural and unexpected deaths
- Clarify facts surrounding the death
- Answer 5 Questions
 - Who, Where, When, How, By What Means

Role of Coroner - continued

- Classify death – 5 Classifications
 - Natural, Accident, Suicide, Homicide, Undetermined
- Make recommendations to prevent future death under similar circumstances
- Fact finding and NOT fault finding
- Unique perspective from that of the clinician

The BCCS and Addictions



Prevention in Deaths due to Prescription Opiates.....

- Prescription opiates
- “Illicit prescription” opiates
- Prescription methadone
- Illicit methadone

- All originated with a physician’s pen

Perfection: The Enemy of the Good!

- **The BC Coroners Service operates in a live database environment. Data are subject to change and are not directly comparable with published counts for previous years. Recent data are considered preliminary until all coroners investigations have been completed.*
**Data should be considered approximate due to system changes in 2006 that required data conversion, and due to the inherent challenges in coding drug overdoses with multiple drug involvement.*

Rx Opiate Deaths

Overdose by Prescription Opiates

- “Prescription Opiates” includes overdose deaths attributed to
 - Fentanyl, codeine, hydromorphone, hydrocodone, meperidine, morphine, oxycodone
- Excludes cases where these medications are sold on the street (“illicit opiates”)
- These cases represent persons overdosing on opiate medications prescribed to them
- Methadone excluded- examined separately

Typical Story for Rx opiates....

- “This 48 year old male was discovered unresponsive in bed by his girlfriend. The evening before his death he consumed a few beer, which was not unusual, and seemed fine. His girlfriend reported he was on disability for chronic pain from a previous ankle injury. He received his regular prescription of 100 tablets of oxycodone and 30 tablets of temazepam 2 days prior to death. Pill count roughly accurate. There was no indication of self harm.”

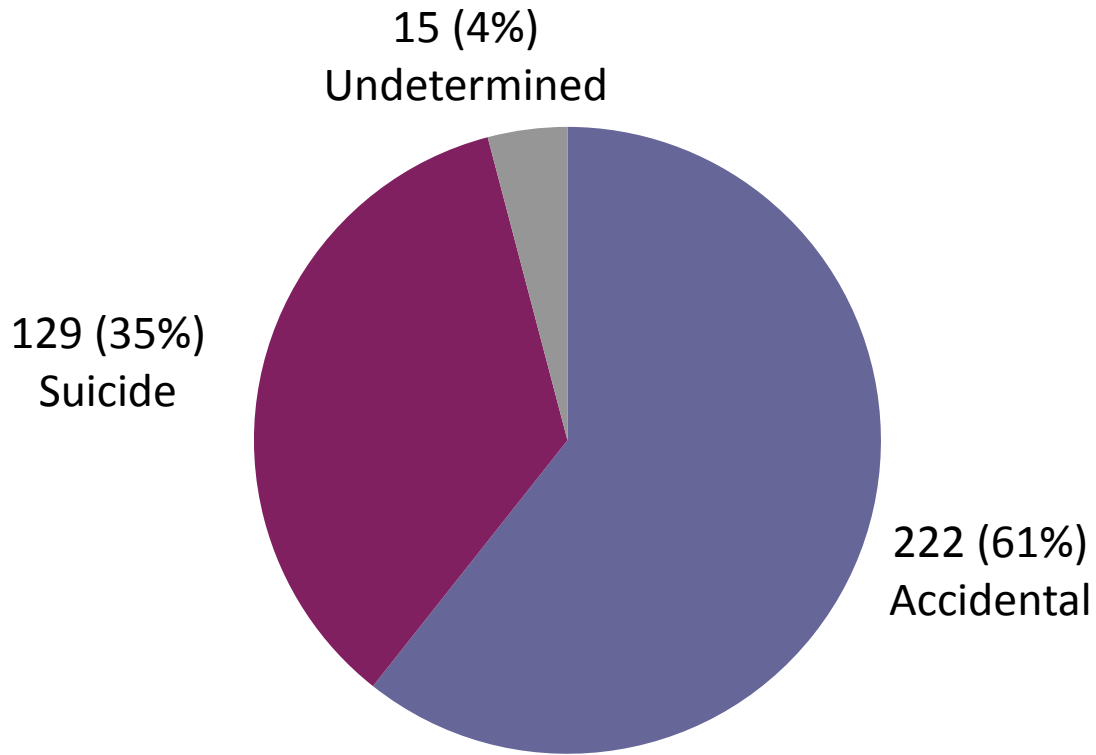
- Conversation with the family physician confirmed the medical history. He received 100 tablets of the oxycodone every two weeks, and it seemed to have improved his pain.



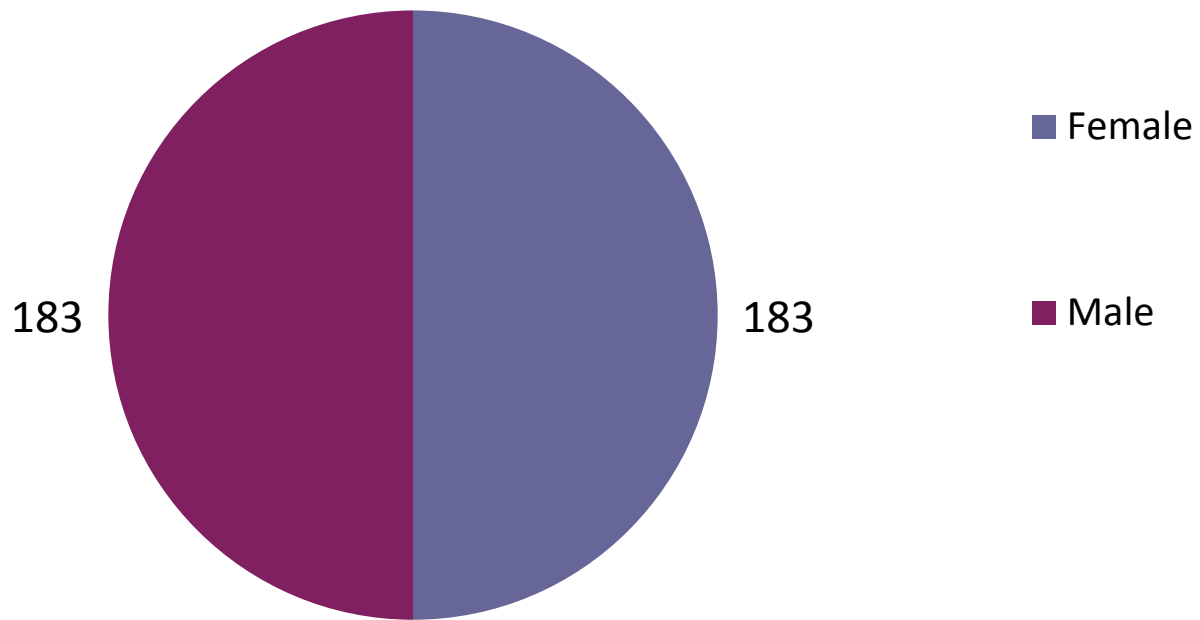
Deaths due to overdose of prescribed opiates in BC, 2005-2009

	2005	2006	2007	2008	2009	Total
Accidental	32	44	45	51	50	222
Suicide	32	26	25	26	20	129
Undetermined	3	5	1	2	4	15
Total	67	75	71	79	74	366

Total Rx Opiate Deaths by Classification 2005-9



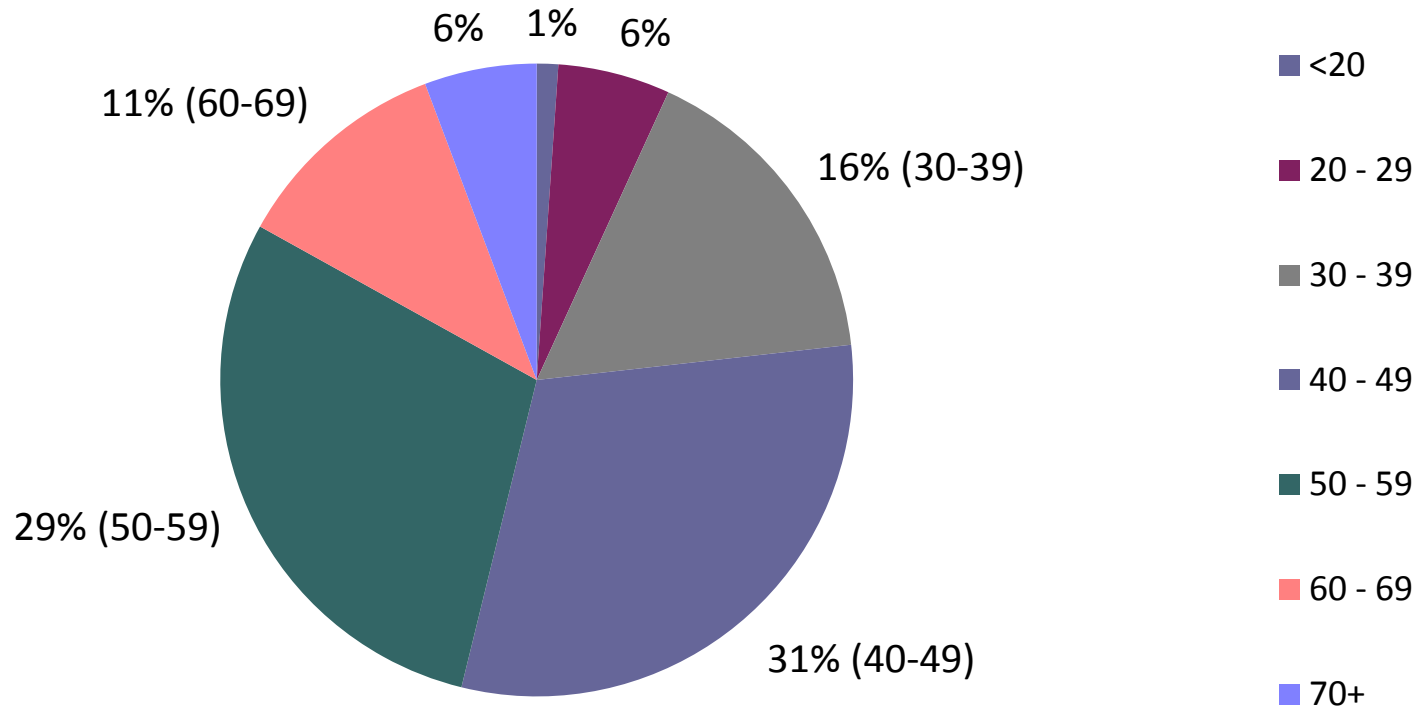
Total Rx Opiate Deaths by Gender 2005-9



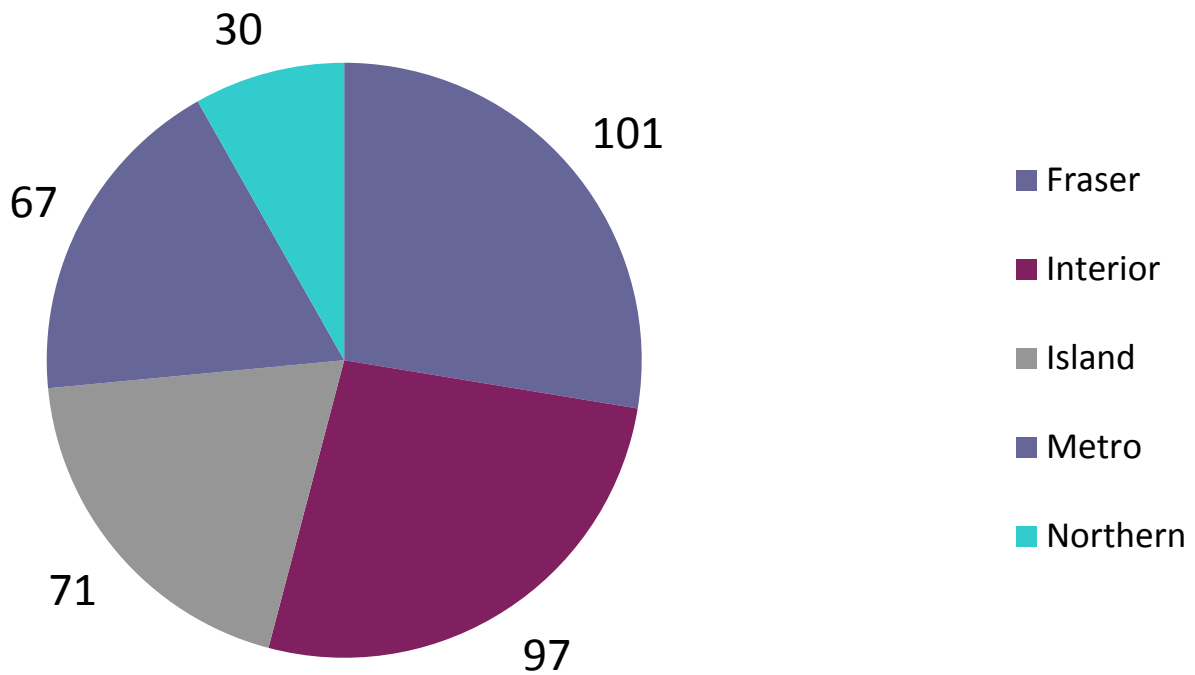
Rx Opiate Deaths by Classification and Gender

	2005	2006	2007	2008	2009	Total
Female	29	43	34	40	37	183
Accidental	11	25	21	27	28	112
Suicide	16	15	13	12	7	63
Undetermined	2	3	0	1	2	8
Male	38	32	37	39	37	183
Accidental	21	19	24	24	22	110
Suicide	16	11	12	14	13	66
Undetermined	1	2	1	1	2	7
Total	67	75	71	79	74	366

Total Rx Opiate Deaths by Age 2005-9



Total Rx Opiate Deaths by Region 2005-9



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

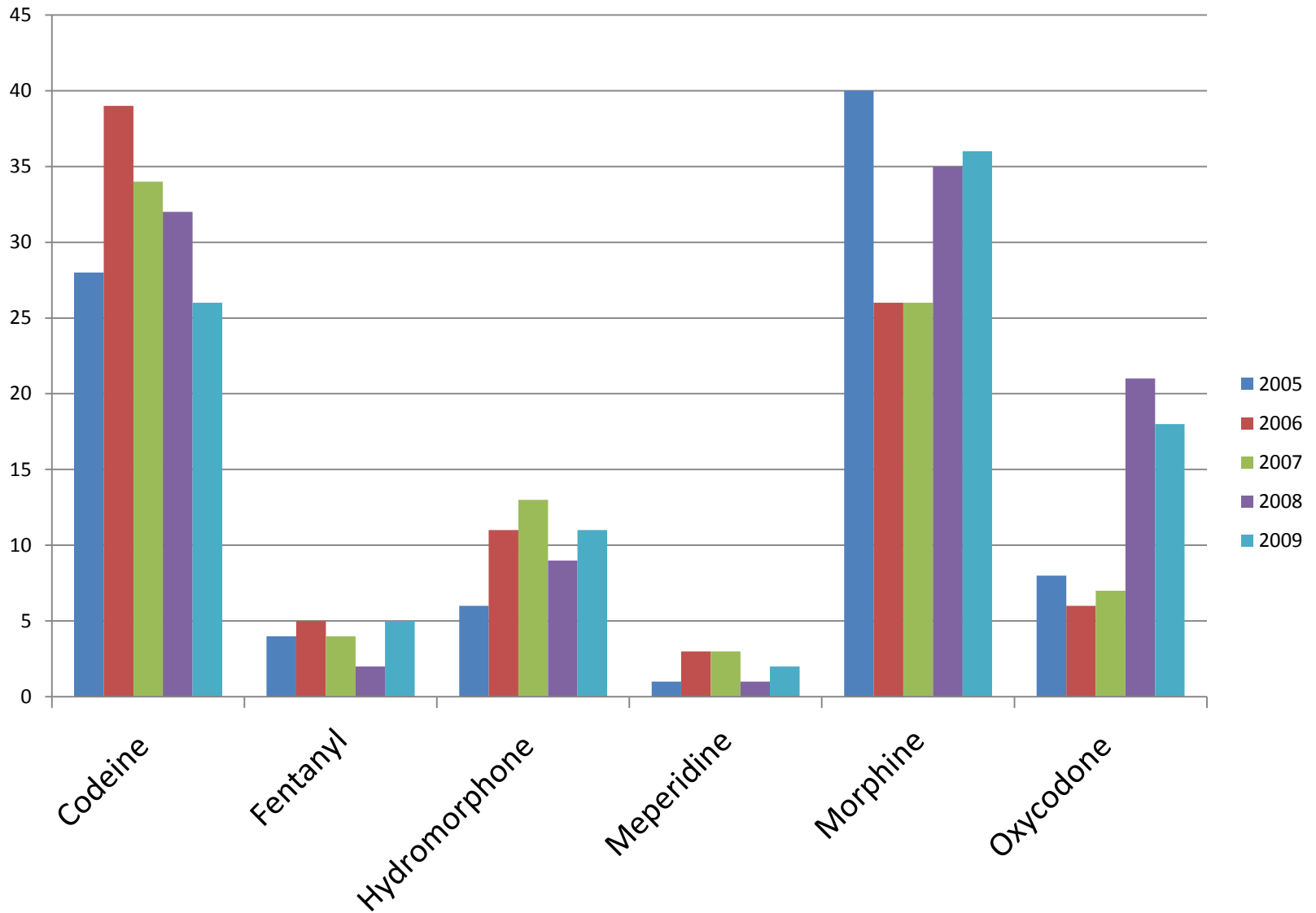
Prescription Opiates and Death Rate by Region, 2009

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 Opiate Deaths by Substance



Take Away Points for Rx Opiates

- The number of deaths attributed to overdoses of prescribed opiates has remained steady from 2005-9 (70-75 deaths per year)
- 61% are accidental deaths, 35% are suicides
- M=F, 40-59 yo
- Oxycodone deaths are increasing
- Not predominantly a Metro problem- higher rates in the Interior

Take Away Points

- The deceased was prescribed these opiates by a physician
 - Indications almost always for non- malignant chronic pain
 - NOT a harm reduction population
 - “First do no harm”

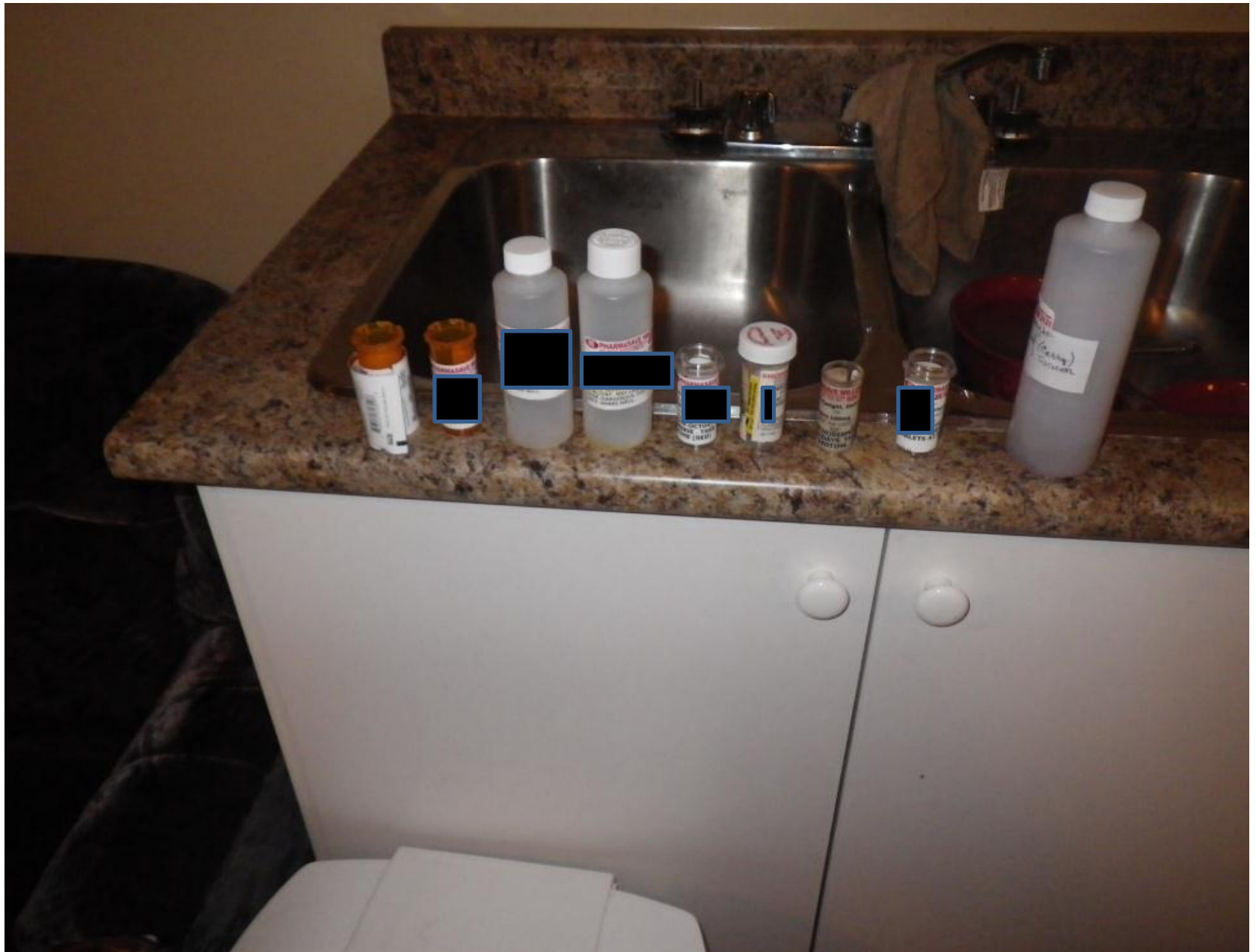
“Illicit Prescription” Opiate Deaths

Definitions

- “Illicit Prescription Opiates” includes overdose deaths attributed to
 - Fentanyl, codeine, hydromorphone, hydrocodone, meperidine, morphine, oxycodone
- These medications were NOT prescribed to the deceased
 - sold on the street
 - ingestion of opiates prescribed to another person
 - origin entirely unknown
- Methadone excluded- examined separately

Remember....

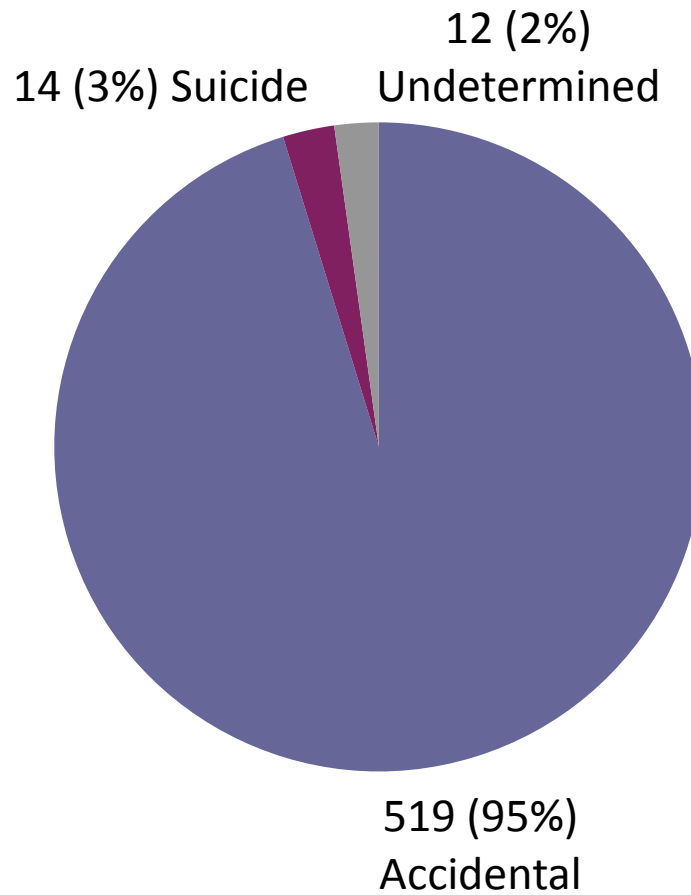
- “Street drugs” are excluded (heroin, cocaine, MDMA, methamphetamine)
- Methadone is excluded (examined separately)
- These medications all originated with a physician’s pen



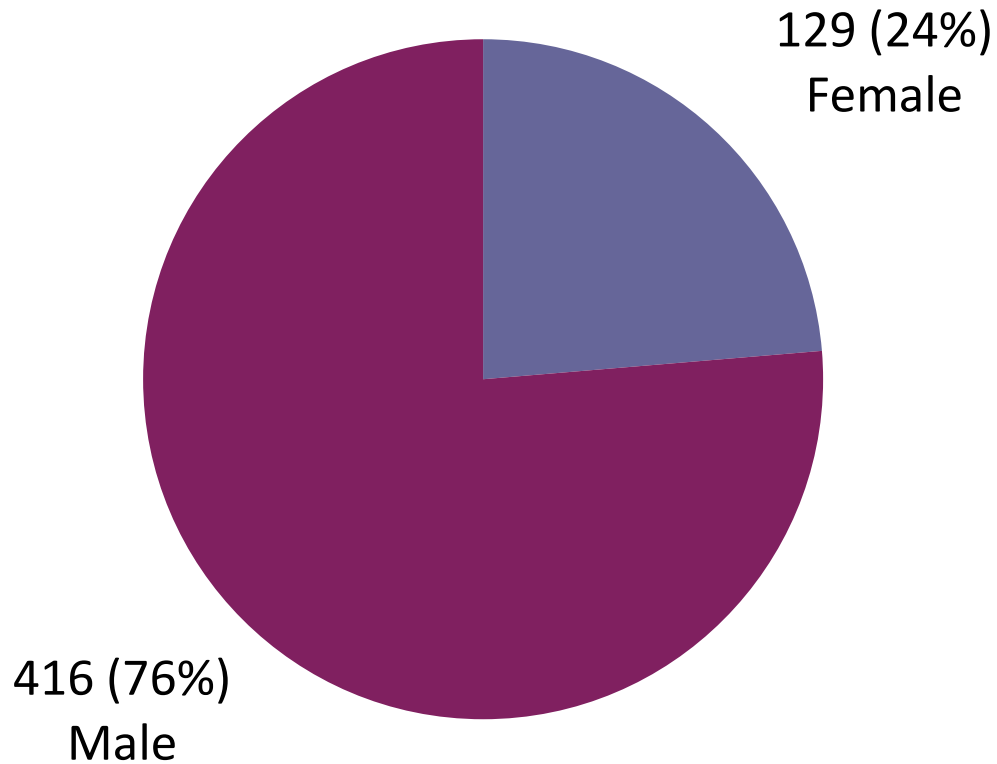
Deaths due to overdose of “Illicit Rx opiates” in BC, 2005-2009

	2005	2006	2007	2008	2009	Total
Accidental	100	119	85	99	116	519
Undetermined	2	2	3	0	5	12
Suicide	4	3	3	2	2	14
Total	106	124	91	101	123	545

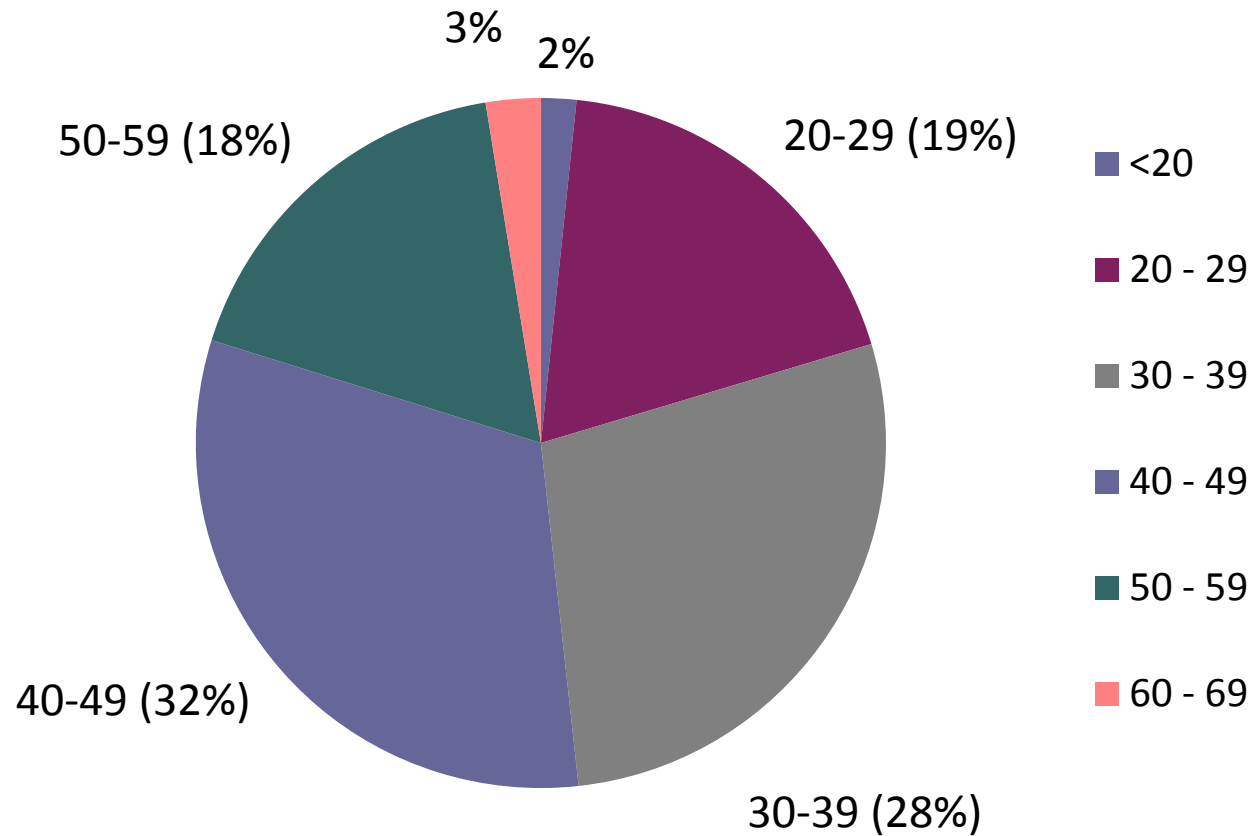
Total Illicit Rx Opiate Deaths by Classification 2005-9



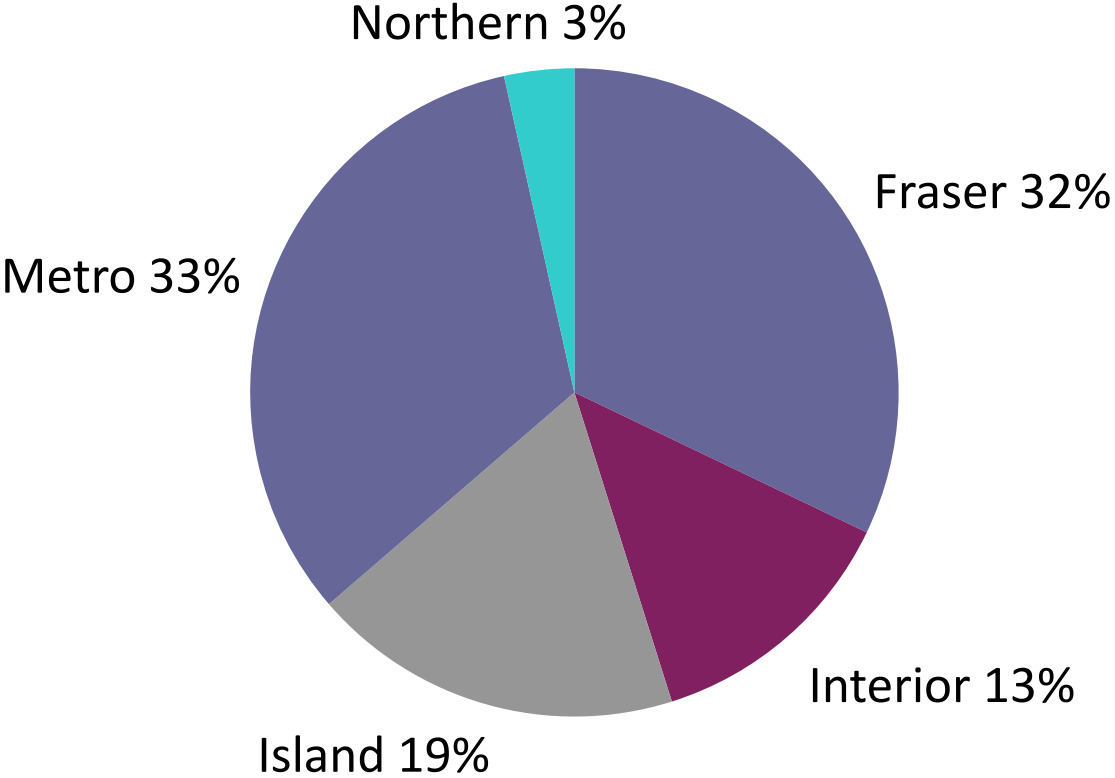
Total Illicit Rx Opiate Deaths by Gender



Total Illicit Rx Opiate Deaths by Age 2005-9



Total Rx Illicit Opiate Deaths by Region



Regional Comparisons

Illicit Drug Deaths and Death Rate by Region, 2009

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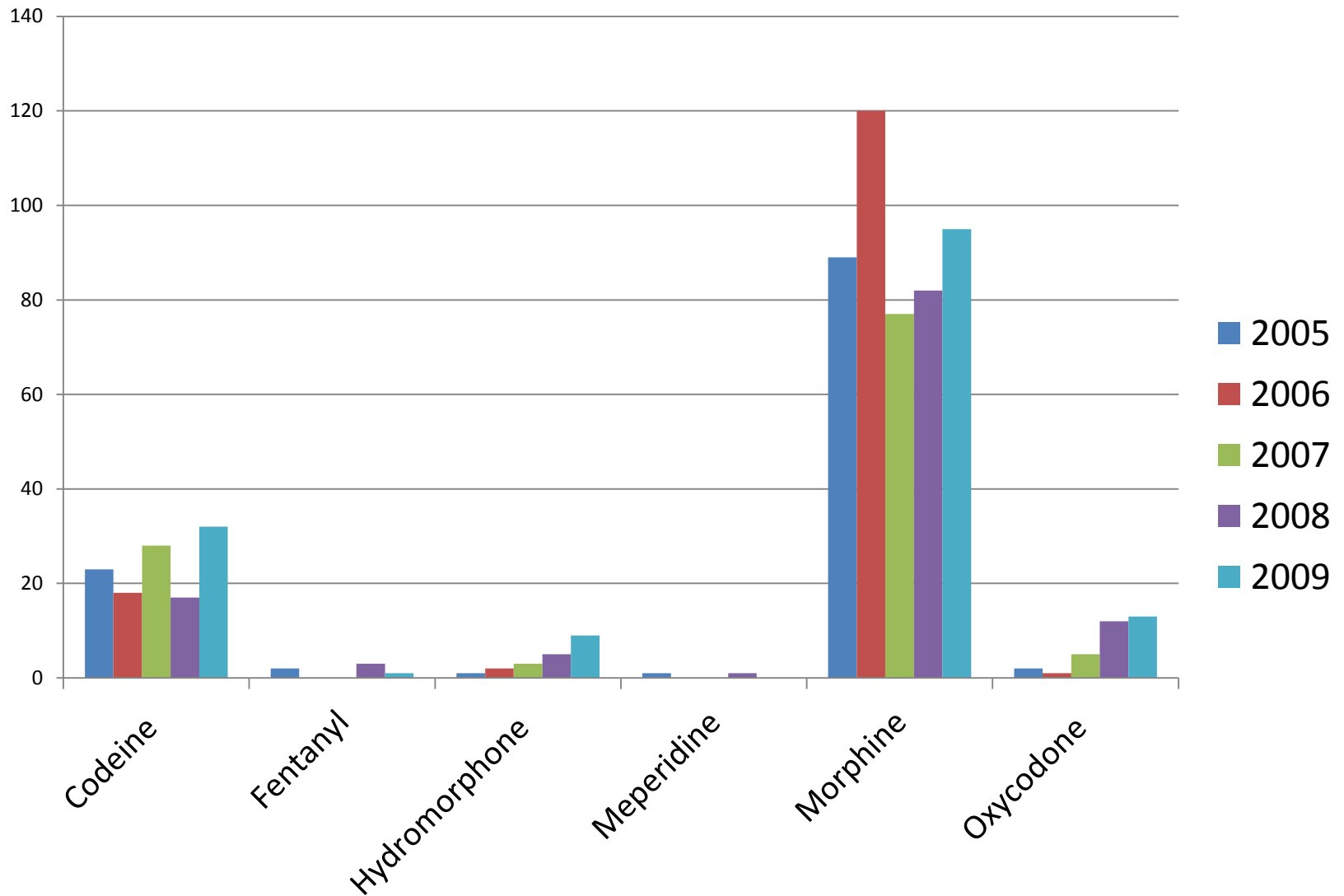
Illicit Prescription Opiates and Death Rate by Region, 2009

Region	Deaths	Rate per 100,000 pl
Fraser	33	2.1
Interior	19	2.6
Island	16	2.1
Metro	49	4.4
Northern	6	2.1
Total	123	2.8

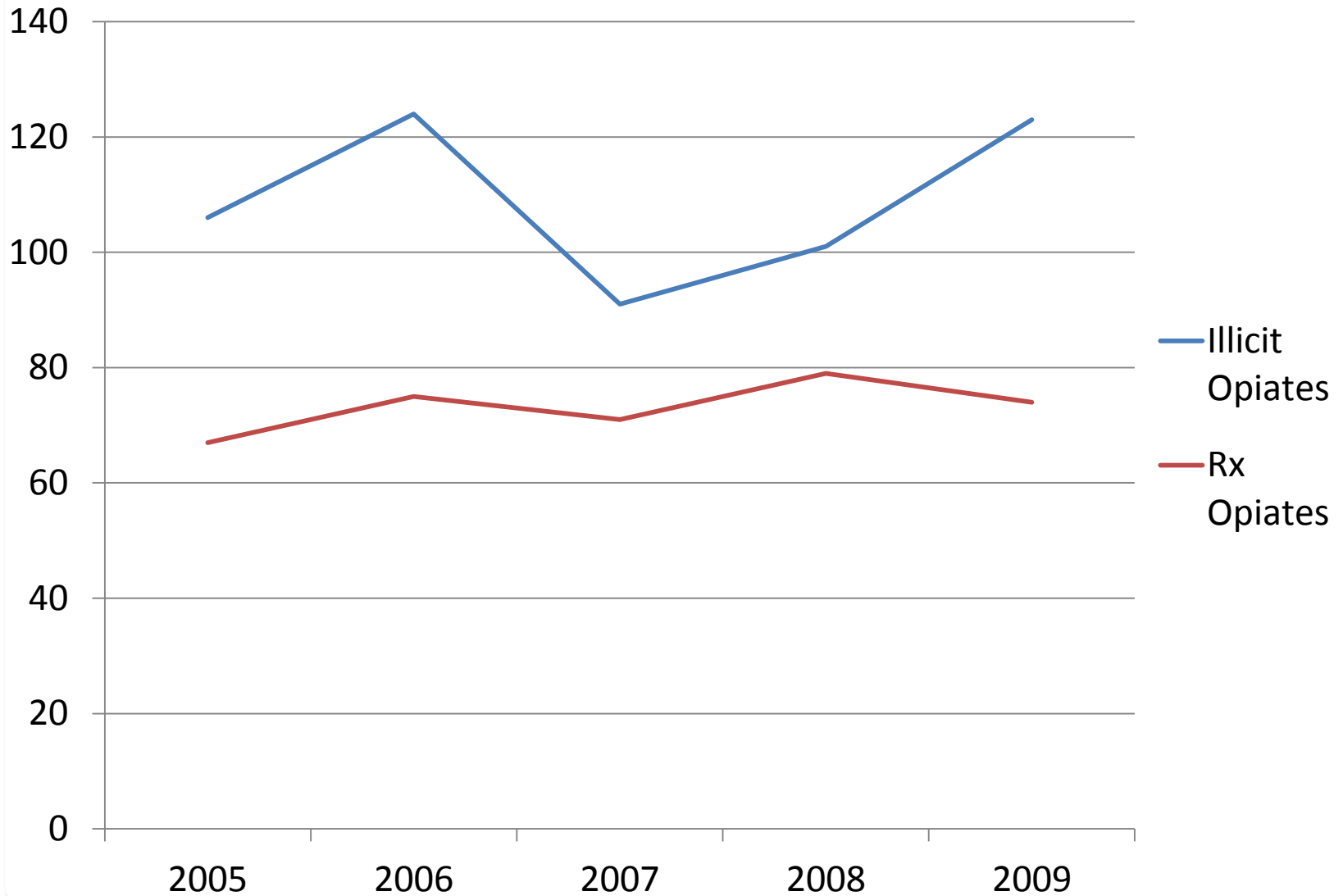
Illicit Rx Opiate Deaths by Substance

	2005	2006	2007	2008	2009	Total
Codeine	23	18	28	17	32	118
Fentanyl	2	0	0	3	1	6
Hydromorphone	1	2	3	5	9	20
Meperidine	1	0	0	1	0	2
Morphine	89	120	77	82	95	463
Oxycodone	2	1	5	12	13	33
Total	118	141	113	120	150	642

Illicit Opiate Deaths by Substance



Illicit and Rx Opiate Deaths, 2005 - 2009



Summary- Illicit Rx Overdose Deaths

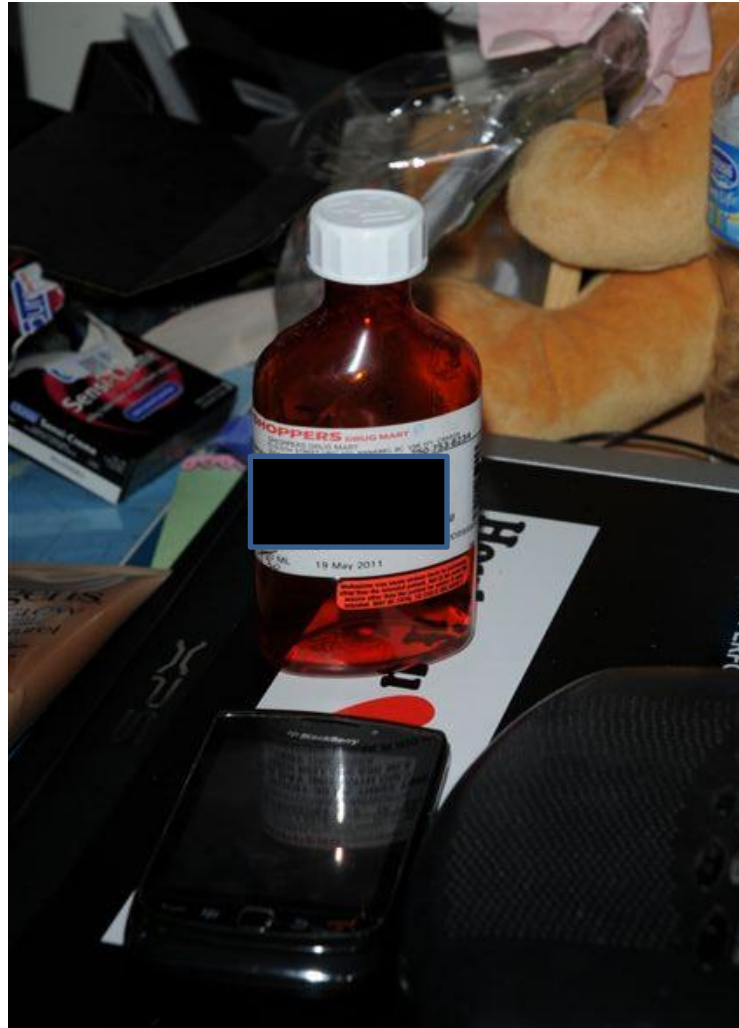
- More common than the category of Rx opiates deaths (around 120 per year)
- 76% are male
- 30-49yo
- 95% are Accidental deaths
- Highest rate in Metro
- n is small, but oxycodone seems to be rising

Summary- Illicit Rx Opiate Deaths

- Interesting profile when contrasted with persons who overdose on opiates prescribed to them
- While the problem seems more “criminal”
The problem can be traced back to a physician writing a prescription to someone for these medications

Rx Methadone Deaths

“Prescription” Methadone



Definitions for Prescribed Methadone

- Overdose deaths where relevant drug was methadone
- Methadone was prescribed to the deceased (excludes cases where it was bought on the street or where the source is unknown)
- Controversy in this area- lethal levels are to be expected
 - In the absence of anatomical findings
- Harm reduction model

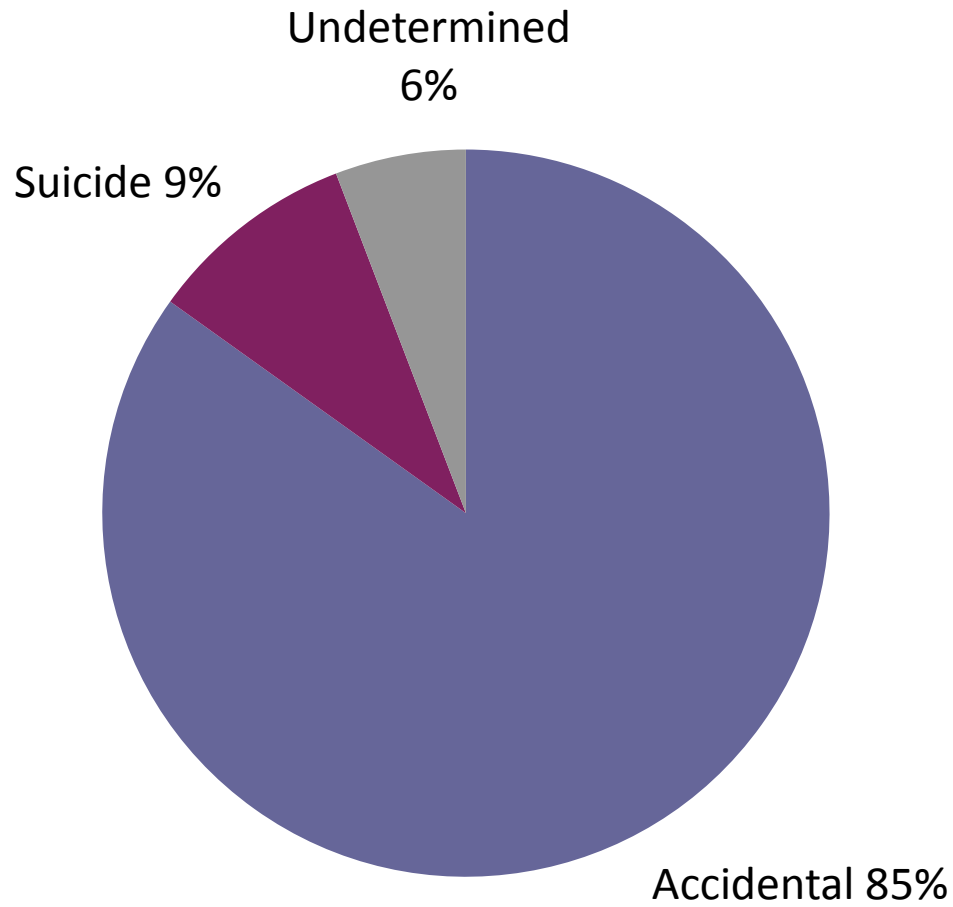
Rx Methadone

- Clinical history is very broad
 - Carries are a common theme, but not universal
 - High starting dose, too much too fast
 - Mixing with other drugs, Rx and illicit

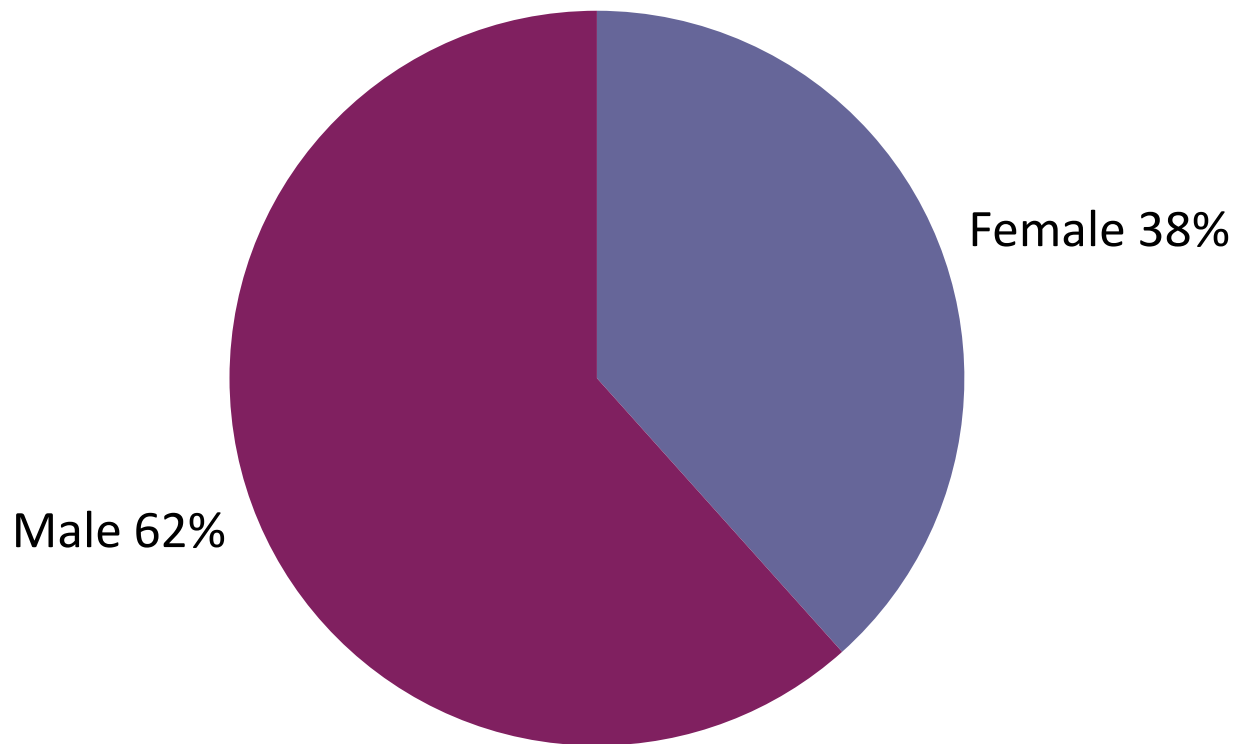
Deaths due to overdose of “prescribed” methadone, 2005-2009

	2005	2006	2007	2008	2009	Total
Accidental	19	10	16	18	10	73
Suicide	0	2	2	3	1	8
Undetermined	0	2	1	1	1	5
Total	19	14	19	22	12	86

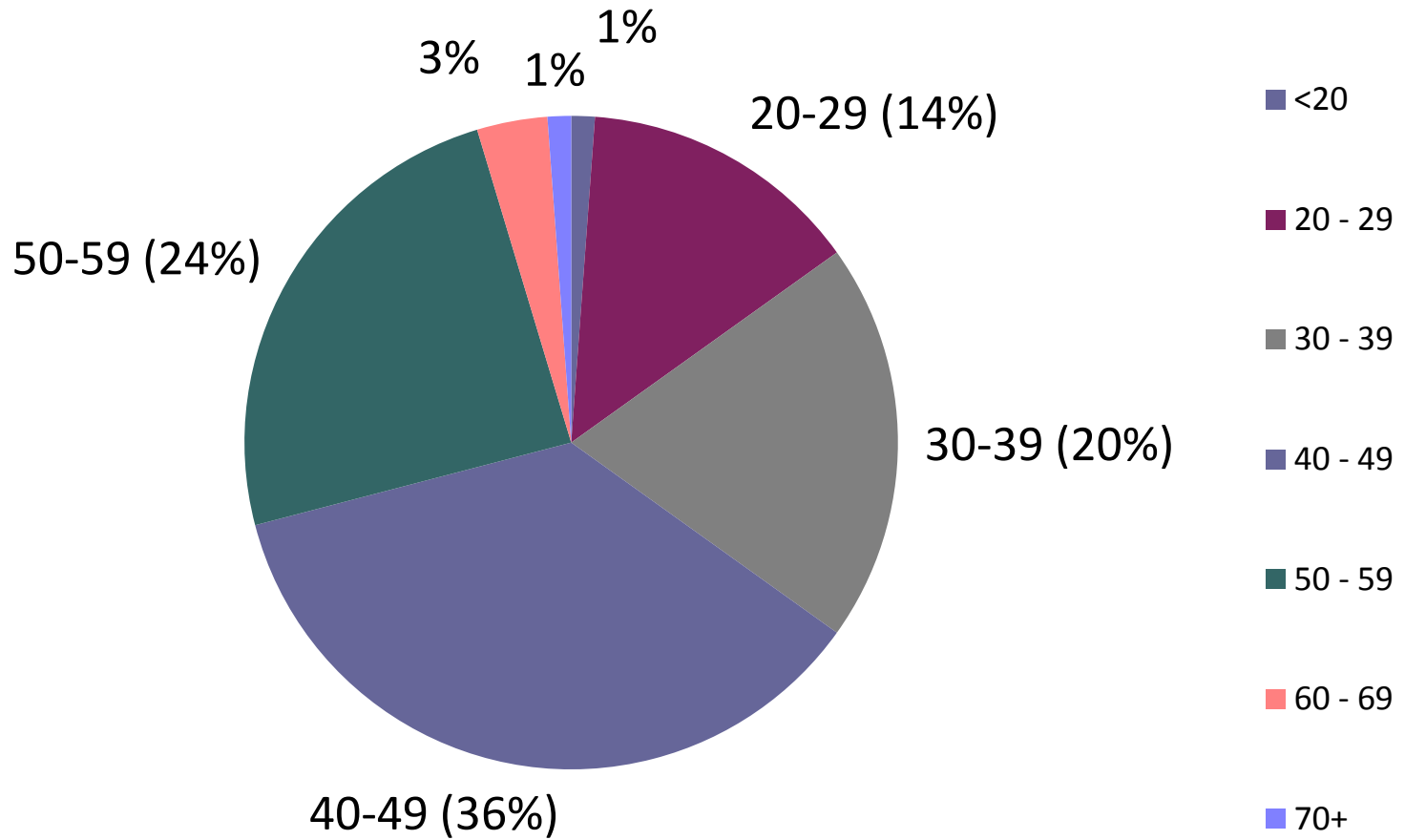
Total Rx Methadone Deaths by Classification, 2005-9



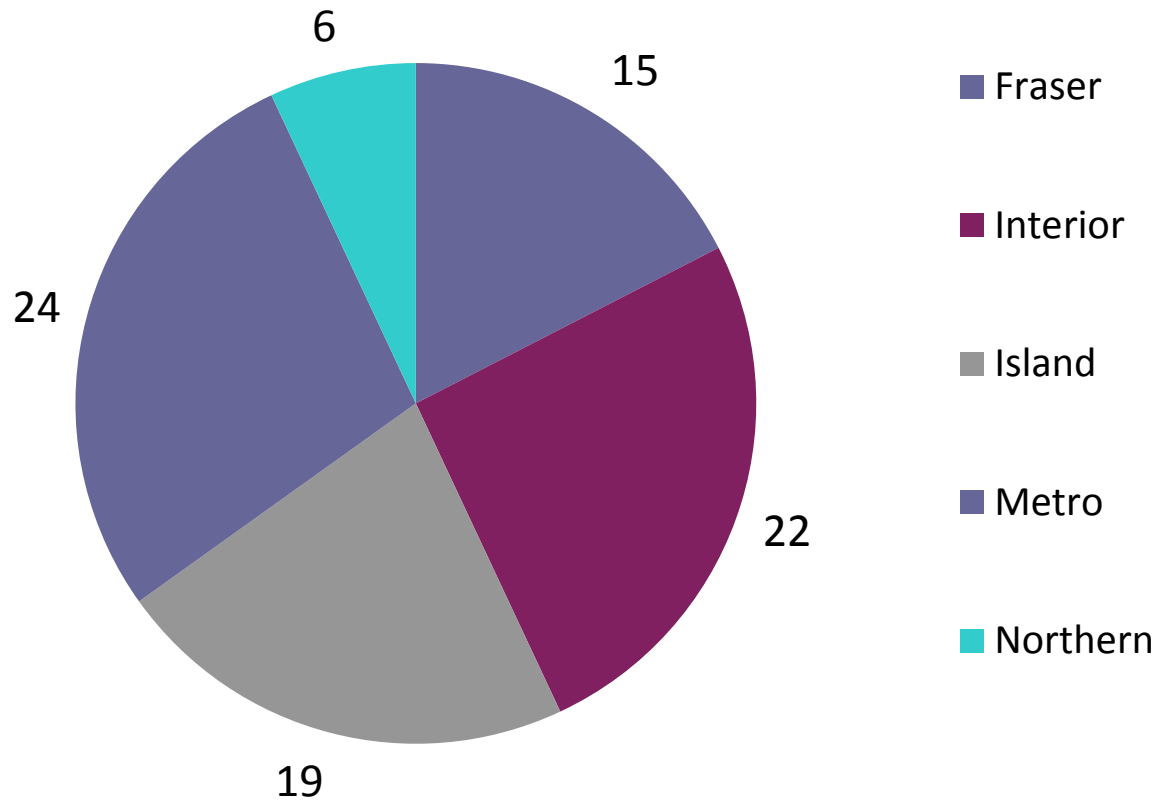
Total Rx Methadone Deaths by Gender, 2005-9



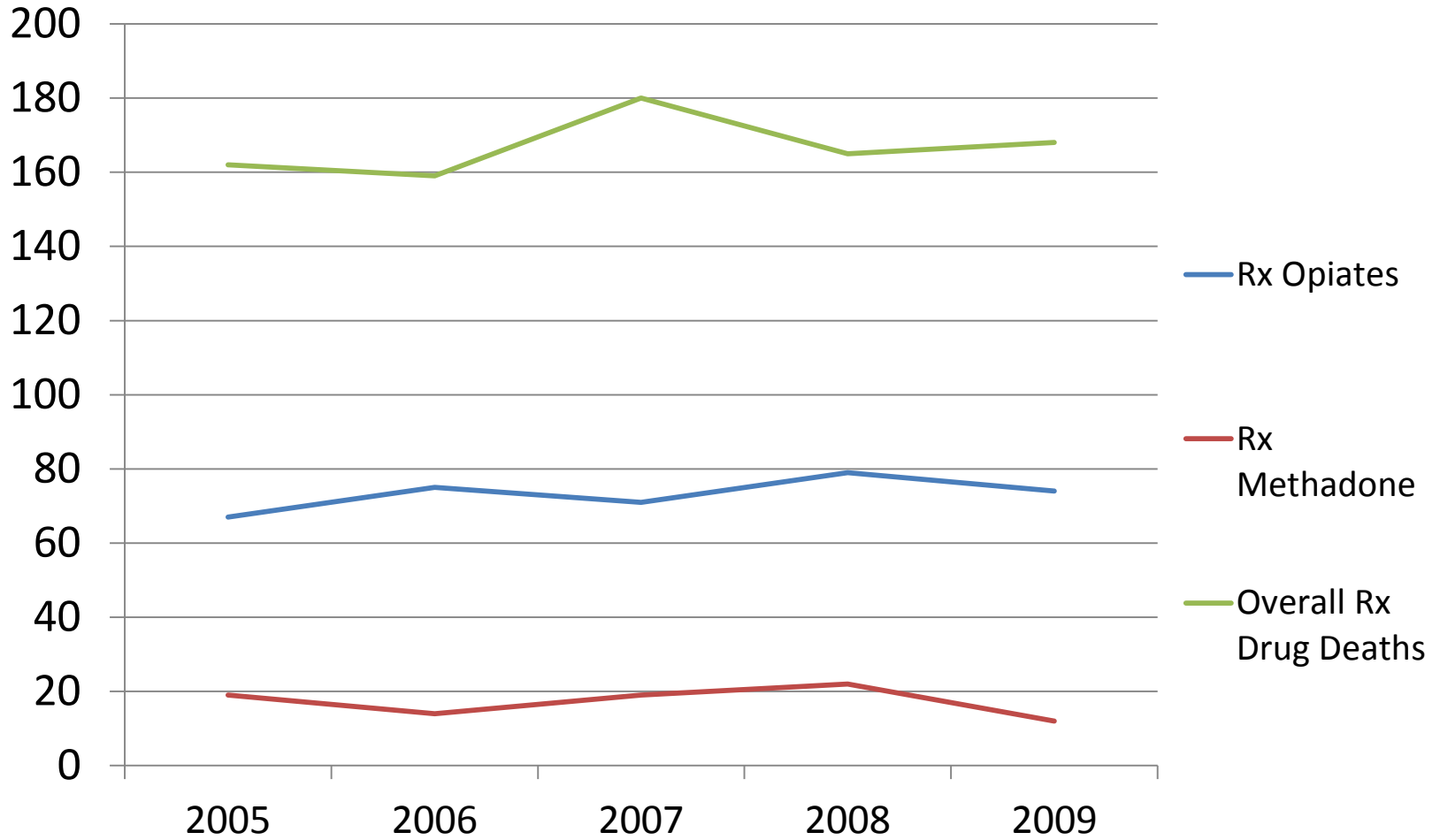
Total Rx Methadone Deaths by Age, 2005-9



Total Rx Methadone Deaths by Region, 2005-2009



Rx Drug Death Trends, 2005 - 2009



Summary for “Prescribed” methadone

- Number of cases relatively constant over the years 2005-9 (15-20/yr)
- 62% are males
- 60% are 40-59 yo
- 85% of deaths are accidental (9% suicide)

Illicit Methadone Deaths

Illicit Methadone



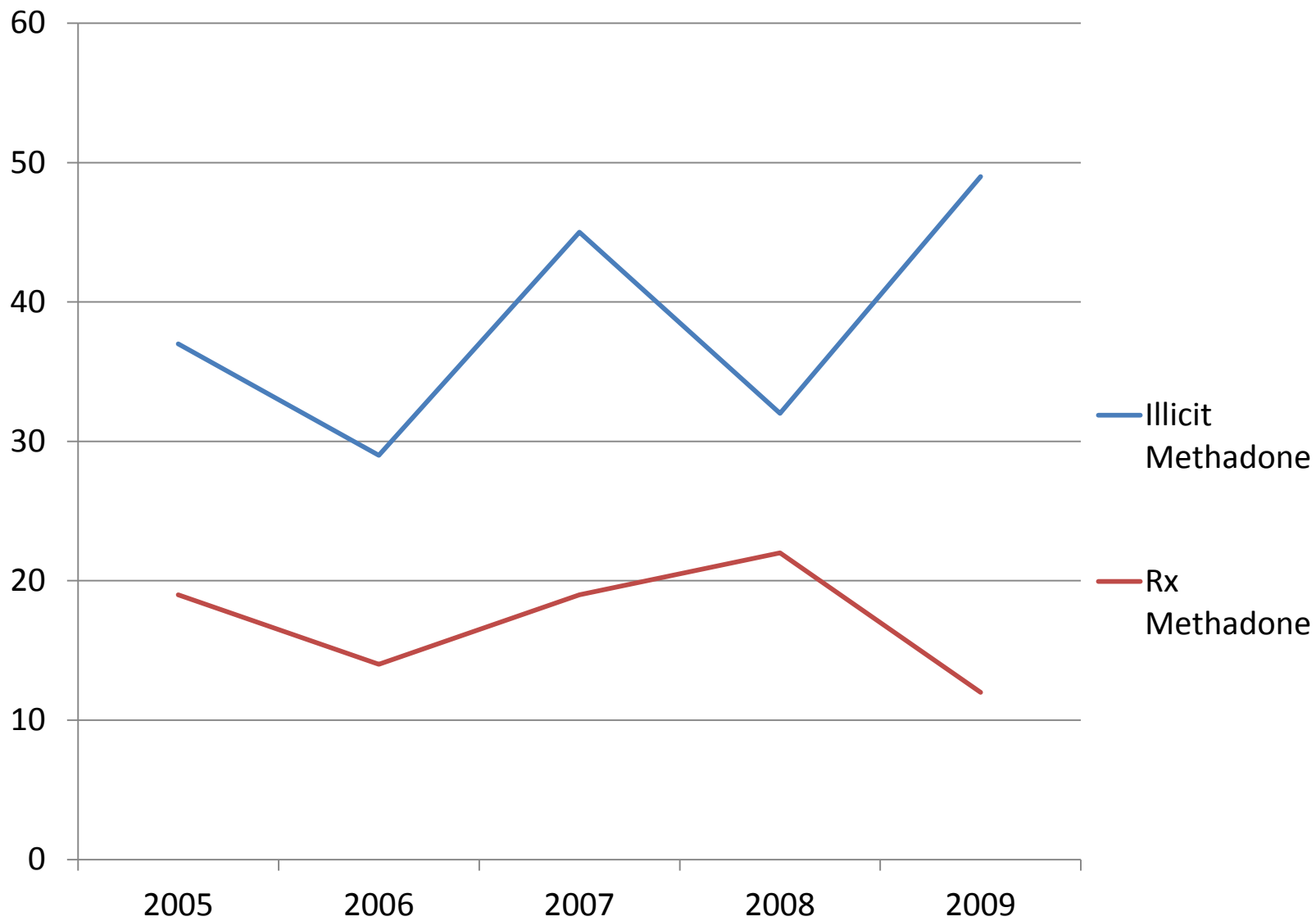
Case History- Illicit Methadone

- Remember that the deceased was not on methadone, therefore the interpretation of toxicology results is more straightforward
- The “carry”
 - Even in cases where the source is not known....

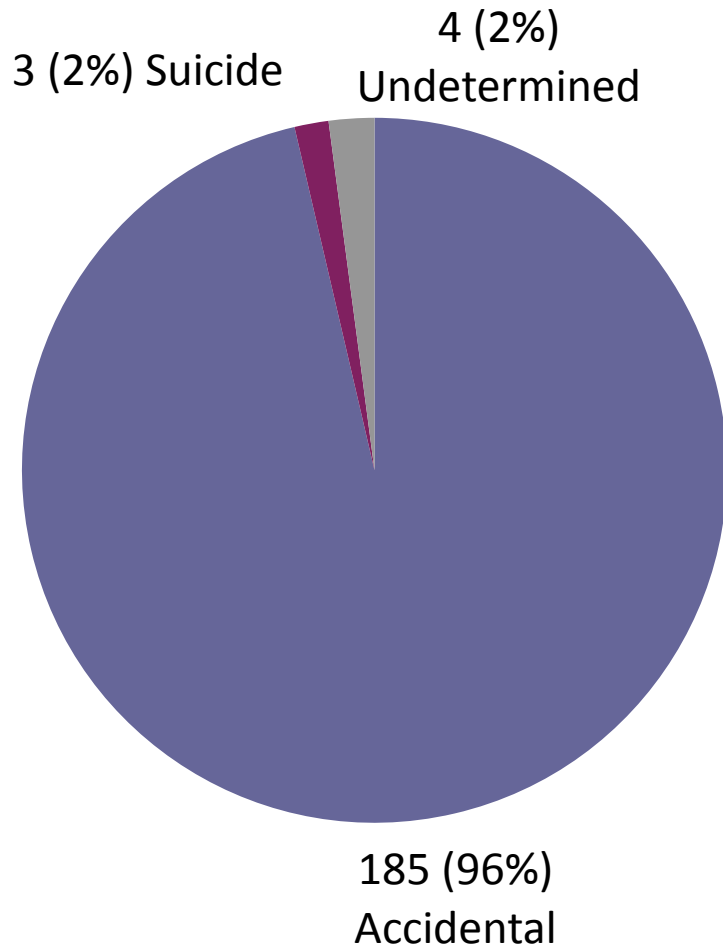
Deaths due to overdose of Illicit methadone, 2005-2009

	2005	2006	2007	2008	2009	Total
Accidental	36	25	44	31	49	185
Suicide	1	1	1	0	0	3
Undetermined	0	3	0	1	0	4
Total	37	29	45	32	49	192

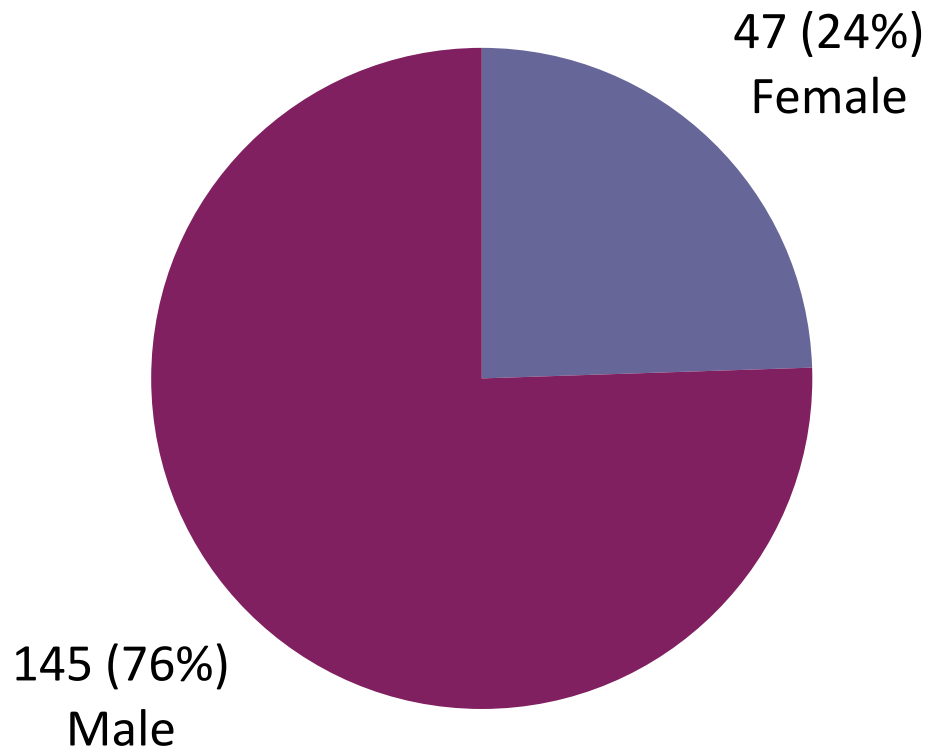
Illicit and Rx Methadone Deaths, 2005 - 2009



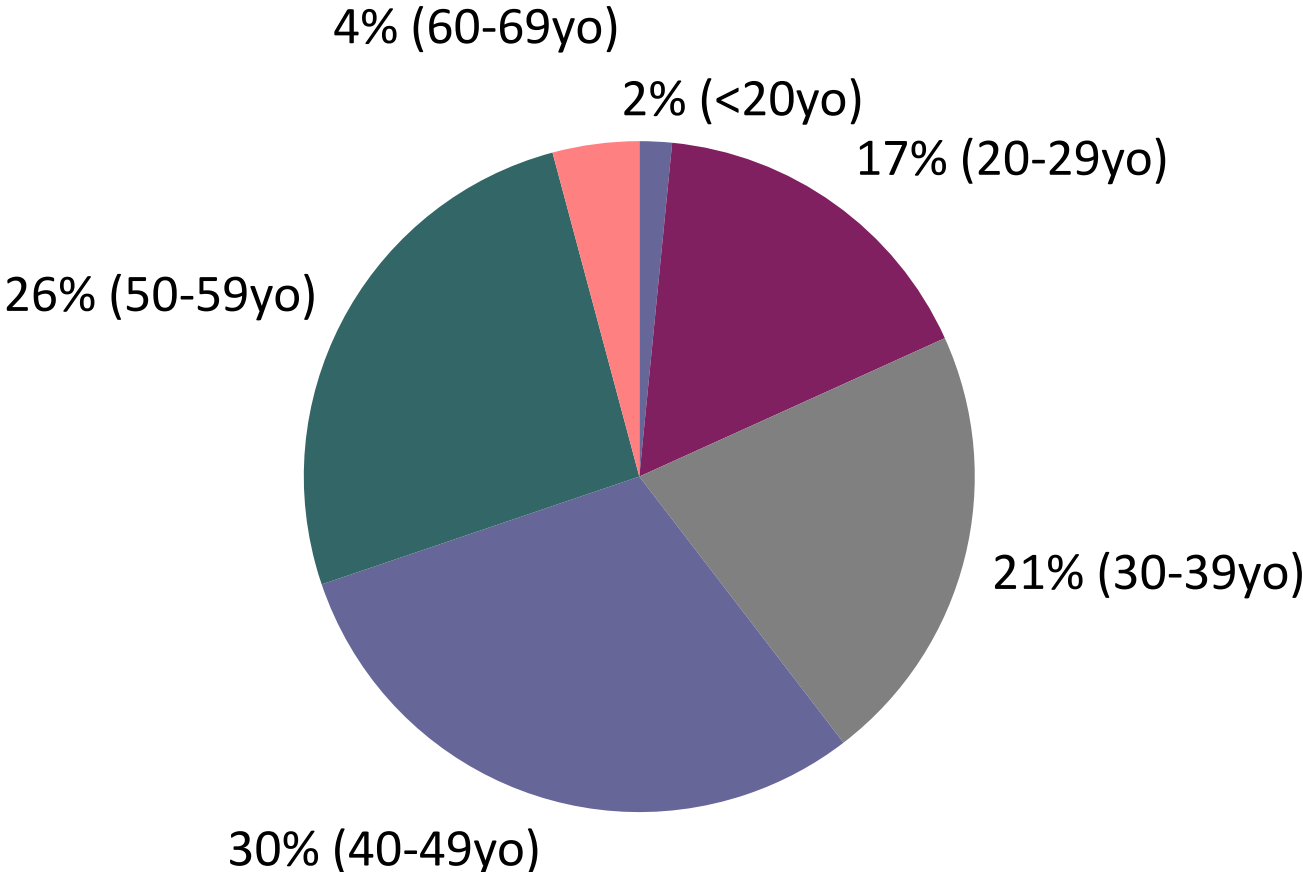
Total Illicit Methadone Deaths by Classification, 2005-9



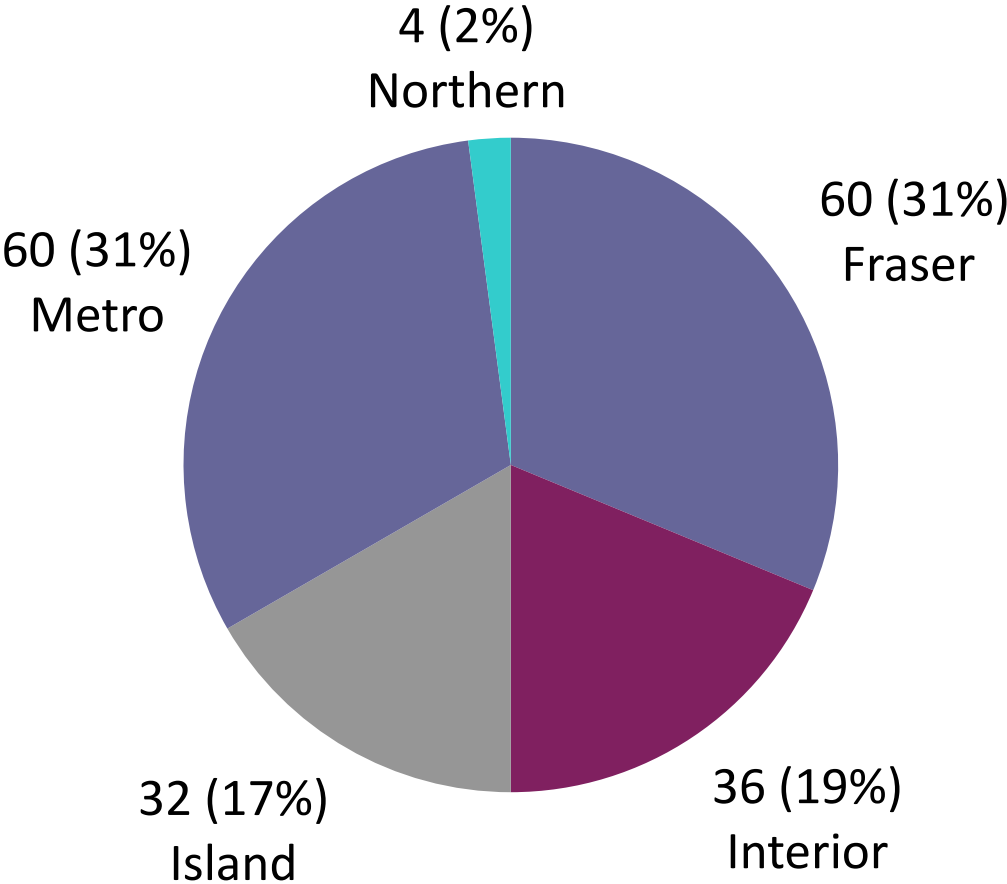
Total Illicit Methadone Deaths by Gender, 2005-9



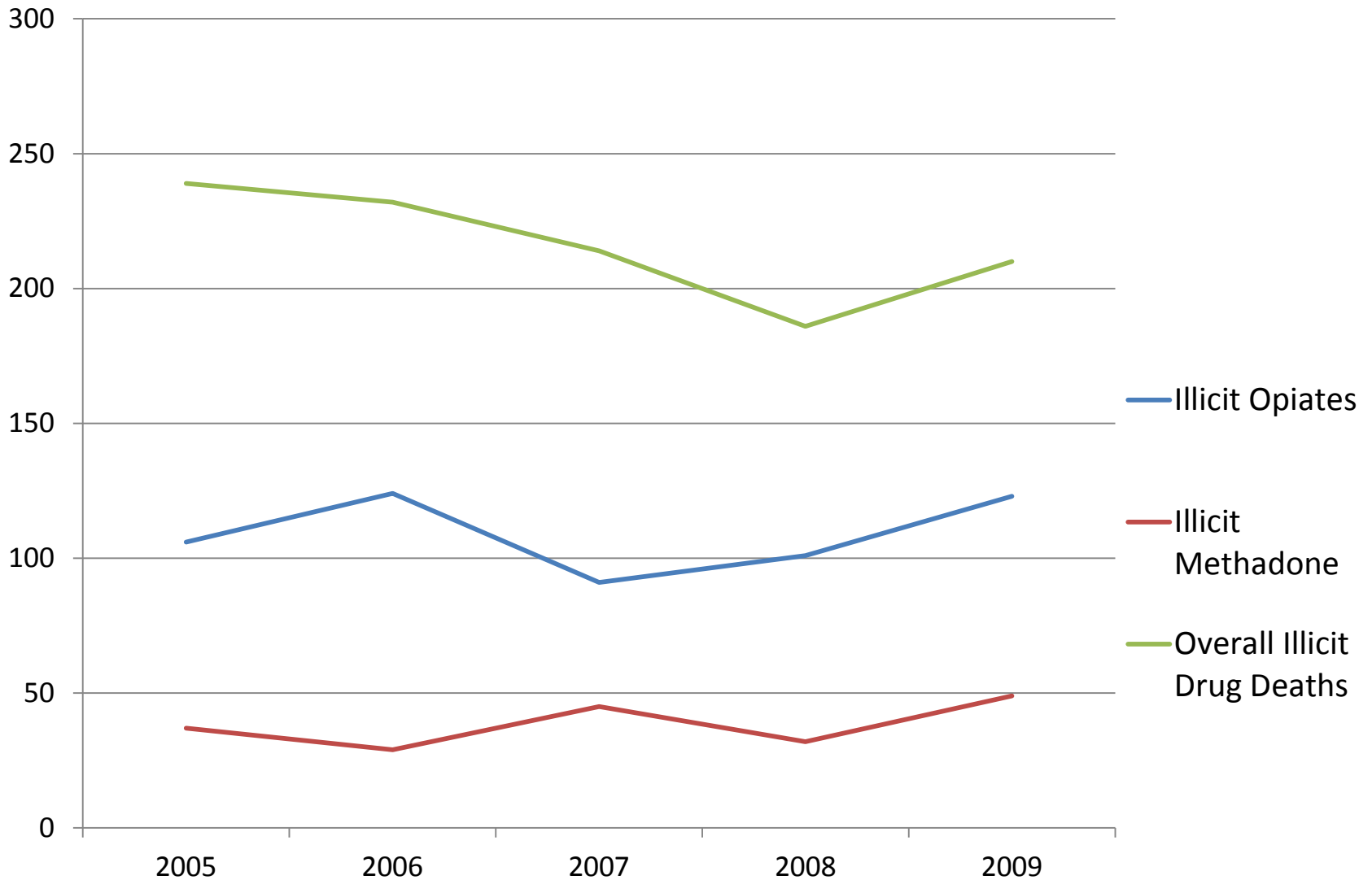
Total Illicit Methadone Deaths by Age, 2005-9



Total Illicit Methadone Deaths by Region, 2005-9



Illicit Drug Death Trends, 2005 - 2009



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?

Methadone

- Harm reduction model
- A “carry” can end up anywhere....
 - Please be mindful of this talk when you are prescribing carries
 - When you see worrisome prescribing habits in a colleague, please do something

Thank you

- Beverly Bouma
- Tej Sidhu
- Norm Leibel
- Lisa Lapointe
- Diane Rothon

Thank you

- Owen COURT, Lisa GRAHAM, Claire THOMPSON, Kate CORCORAN, Bilal WAHEED, Dan DEVLIN, Fiona CONROY, Eirik FEIR, Isis VAN LOON, Rod MANSON, Shane DEMEYER, Donita ZUMA, Tammy KITCHEN, John Andrews, Leslie CAMERON, Art ERASMUS, Merrill FLEWELLING, Robert ZACHARIAS, Kris HAUGAN, Ronda KINGSLEY, Janice SABULSKY, Joy SUNDIN, Dawn MORLEY, Scott McLAUGHLIN, Tom ROBINSON, Sandra SNIDER, Monica ZIEPER, Ken McAULAY, Lynne HYATT, Ida ALLEMAN, Matt BROWN, Lyn BLENKINSOP, Barb McLINTOCK, Stacey JOHNSTON, Liza BAKER, Sean MURPHY, Dan DOERKSEN, Honey FORBES, Heather PATE, Dave SHERSTONE, Ron TRAMER, Willem VAN HERK, Jonet MACKENZIE, Stan LAJOIE, Lori MOEN , Michael BUTLER, Larry CRAWFORD, Kim BAILEY, Kevin McNEILL, Mark COLEMAN, Chico NEWELL, Shannon BENDER-BELL, Margaret JANZEN, Debra SMART, Jocelyn Sofonoff, Mike BARRETT, Andy CAVE, John GUIGNION, Laura DEWAR, Terry DIXON, Brenda DOWNEY, Cory DAYE, Diana GONZALEZ, Gail HOLOTUK, Al HOSSIE, Shawn JESTLEY, Gerald MADDOCK, Tim LOADER, Gerry MACINTYRE, Elizabeth NOBLE, Sherrill PAINE, Janice RILEY, Phil ROGERS, Nina-Lynn HAMILTON, Wally BURNS, Patrick DUNCAN, Vincent STANCATO, Tara DEVINE, Liana WRIGHT, Nicki DENNISON, Tim WILES, Susan Mansfield, Cyd ROBINSON, John VELDMAN, Nancy WILSON, Kemal Khan, Stacey Sasyniuk, John Knox

Your feedback is always welcome

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