

Substance Use in Toronto: Trends and current issues

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TO Urban Health Fund Review Panel

This presentation: Toronto data

- Information sources
- Demographics
- Prevalence of use among:
 - Mainstream: Students (grades 7-12) & Adults 18+
 - People using drugs...
- Deaths (preliminary data only)
- Ongoing issues

Sources: Prevalence among mainstream populations

- CAMH Monitor 2013
 - Adults 18+, surveyed by phone
 - Data shown is for Toronto sample, 647 & 416 area codes, 503 people
- OSDUHS 2013 – Ontario Student Drug Use & Health Survey (since 1977)
 - Surveys at schools across Ontario
 - Data shown is for Toronto sample, 769 students in Grades 7-12

Sources: Prevalence among people with higher rates of drug use

- I-Track: Federally funded, now in 3rd phase, ‘Sentinel’ study of drug users across Canada
 - Interviews at harm reduction programs in Toronto: 498 in 2011, 255 in 2007
 - Participants are 16+, have injected drugs and/or smoked crack cocaine in past 6 mths.

Note: I-Track source info./citation provided at end.

Sources: Prevalence among people with higher rates of drug use

- Health Canada (2014). Monitoring of Alcohol and Drug Use Among High-Risk Populations Study (HRPS), 2012-1013 prevalence for:
 - “Street-Entrenched” Adults
 - Street-Involved Youth
 - “Recreational” Drug Users (clubs, raves, bars...)
- TRIP! Toronto Youth Drug Survey
 - Online survey of drug using youth in party scenes in Toronto, May 2014 (preliminary data only)

Note: Health Canada source info./citation provided at end.

Sources: Prevalence among people with higher rates of drug use

- Substance use treatment service admissions
 - Drug & Alcohol Treatment Information Service (DATIS), CAMH
- Black CAP (Black Coalition on AIDS Prevention) Harm Reduction Survey
 - Snapshots of substance use, sex & related issues, January & July 2014



Demographics

Gender & Age

- Gender typically 2/3 male to 1/3 female, reflecting who uses adult harm reduction, homeless services and treatment services
 - Exceptions, e.g. TRIP survey 51% Female, 47% Male, 3% TS/TG and Other*
- Typically middle-aged, e.g. The Works & partners Jan-Apr 2014: 35-44, 58%
 - Exceptions, e.g.:TRIP! online survey: 19-24: 61%

**Note: TS/TG/Other gender may either not be included in research/data, or is included with male/female due to low numbers/identifying as trans-male, trans-female.*

Race/ethnicity

Self-identified race/ ethnicity	I-Track*	Black CAP	TRIP	Homeless adults <small>(Health Canada)</small>	Street youth <small>(Health Canada)</small>	"Recreational"/ club drug users <small>(Health Canada)</small>
<i>by % of respondents</i>	2011	2014	2014	2013	2013	2013
White	65	31	81			
First Nations/Metis/Inuit / Aboriginal	27	23	2	47.4	9.1	10.4
Black (African and/or Caribbean and/or Other)	13	29	4			
East Asian			9			
South Asian	0.5		6			
Arab and/or Middle Eastern	1		5			
Other	21	17	5			

Sexual orientation


By % of sample	I-Track 2011	TRIP! 2014
Heterosexual/straight	87%	77%
Bisexual	7%	14%
Gay or Lesbian	2%	4%
2-Spirit	1%	
Other	1%	5%

Housing status

- I-Track:

I-Track participants	2007	2011
Stable housing/own place	51%	54%
Unstable housing/ homeless	49%	46%

- TRIP!: 7.1% homeless



Prevalence of substance use among high school students & adults 18+:

OSDUHS 2013 and
CAMH Monitor 2013,
Toronto samples

OSDUHS 2013 & CAMH Monitor 2013

Alcohol & Cannabis	Grades 7-12 (OSDUHS)	Adults 18+ (Monitor)
Alcohol use in past year	41.5%	72.3%
Binge drinking (past month - OSDUHS, weekly - Monitor)	14.1%	7.4%
Hazardous/ harmful drinking in past year	13.0%	18.6%
Cannabis use in past year	22.9%	15.0%

CAMH Monitor E-Report: Addictions and mental health indicators among Ontario adults 1977-2013. AR Ialomiteanu, EM. Adlaf et al., Toronto, 2014.

Boak A. et al, CAMH (2013). Drug Use among Ontario Students, 1977-2013: detailed OSDUHS Findings, CAMH.

OSDUHS 2013 & CAMH Monitor 2013

Non-medical prescription opioid use	Grades 7-12 (OSDUHS)	Adults 18+ (Monitor)
2013	14.6%	2.6%
2011	12.8%	4.3%
2009	16.8%	■
2007	17.9%	■

Of the 14.6% noting non-medical opioid use, 64% said the source was parents/siblings


CAMH Monitor E-Report: Addictions and mental health indicators among Ontario adults 1977-2013. AR Ialomiteanu, EM. Adlaf et al., Toronto, 2014.

Boak A. et al, CAMH (2013). Drug Use among Ontario Students, 1977-2013: detailed OSDUHS Findings, CAMH.

Summary

Higher among adults	Higher among students
Alcohol use	Binge drinking*
Hazardous/ harmful drinking	Cannabis use
	Driving within an hour of drinking
	Non-medical prescription opioid use

*Consistent with 13% of students reporting drunkenness, drinking games, and having mixed alcohol and energy drinks



Prevalence of substance use among people using drugs

(Homeless adults and youth, youth in
club/party scenes, people in treatment
services)

Street-Involved Adults

Average % using drug in past year/ past 6 months (I-Track): <i>Method of use</i>	Health Canada 2012-2013	I-Track 2007, 2011 <i>Injected</i>	I-Track 2007, 2011 <i>Not injected</i>	Black CAP, Jan. 2014
Alcohol	91%		70%	68%
Cannabis	89%		72%	58%
Cocaine				
Powder	62%	69%	62%	
Crack	78%	56%	92%	
Any form				58%
Speed				
Amphetamines	13%	9%	9%	10%
Methamphetamine	24%	11%	11%	8%
Ritalin	11%	10%		
Benzodiazepines	32%	7%	38%	17%

Street-Involved Adults

Average % using drug in past year/ past 6 months (I-Track): <i>Method of use</i>	Health Canada 2012-2013	I-Track 2007, 2011 <i>Injected</i>	I-Track 2007, 2011 <i>Not injected</i>	Black CAP, Jan. 2014
Opiates				32%
Heroin	32%	52%	23%	
Oxycodone	52%	51%	44%	
Dilaudid/ hydromorph.	25%	49%	22%	
Morphine	34%	49%	28%	
Tylenol with codeine			51%	
Codeine	41%		27%	
Fentanyl		19%	8%	
Methadone	15%	5%	26%	
Speedballs	11%	16%		

Street-Involved Adults

Average % using drug in past year/ past 6 months (I-Track): <i>Method of use</i>	Health Canada 2012-2013	I-Track 2007, 2011 <i>Injected</i>	I-Track 2007, 2011 <i>Not injected</i>	Black CAP, Jan. 2014
Hallucinogens				
Ecstasy/MDA/MDMA	31%		20%	4%
LSD/Acids	4%		4%	
Magic mushrooms	25%		10%	
Dissociatives				
GHB	15%		1%	1%
Ketamine	15%	6%	4%	3%
Other		12%	16%	

Street youth & Youth in club/party scenes

Prevalence of use: % using	Street-Involved Youth (past year)	"Recreational users" - clubs, raves, bars (past year)	TRIP Survey (past 6 months)
	Average 2012-13	Average 2012-13	2014
Alcohol	96%	98%	86%
Cannabis	98%	94%	73%
Cocaine			
Powder	44%	67%	31%
Crack	19%	13%	0%
Speed			
Amphetamines	25%	42%	13%
Crystal meth/ methamphetamine	40%	23%	2%
Ritalin/ Dexedrine (TRIP)	0%	18%	3%

Street youth & Youth in club/party scenes

Prevalence of use: % using	Street-Involved Youth (past year) Average 2012-13	"Recreational users" - clubs, raves, bars (past year) Average 2012-13	TRIP Survey (past 6 months) 2014
Hallucinogens			
Ecstasy	61%	70%	21%
MDMA/MDA			60%
LSD	8%	46%	13%
Magic mushrooms	42%	52%	14%
Salvia	15%	11%	2%
Dissociatives			
GHB	11%	13%	5%
Ketamine	24%	69%	16%
Research Chemicals (2CB/2CI/2CT7/Foxy/AMT)			4%

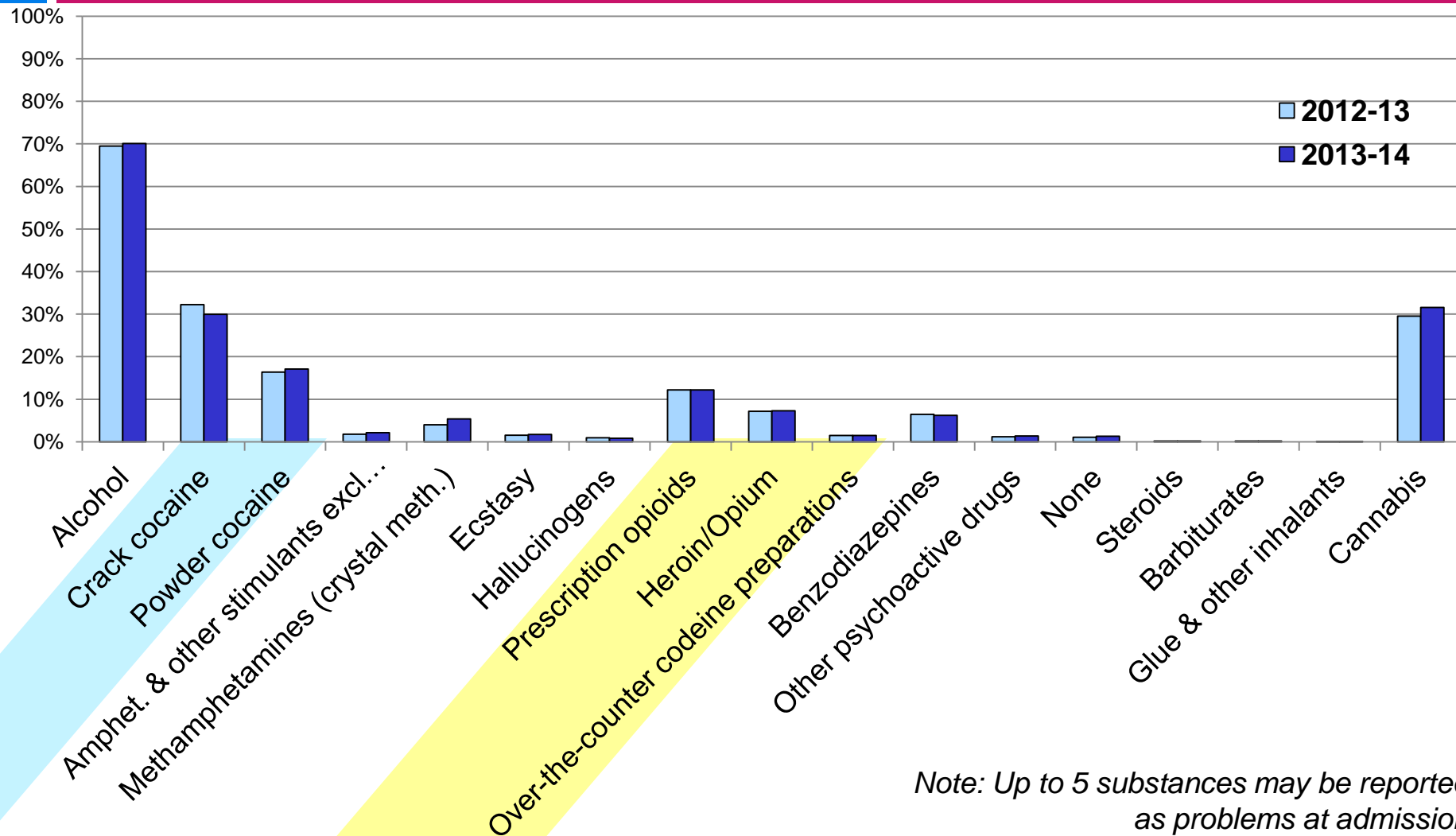
Street youth & Youth in club/party scenes

Prevalence of use: % using	Street-Involved Youth (past year) Average 2012-13	"Recreational users" - clubs, raves, bars (past year) Average 2012-13	TRIP Survey (past 6 months) 2014
Opiates			
Dilaudid	8%		1%
Heroin	13%	11%	1%
Oxycodone	29%		
Codeine	15%		
Methadone	8%		
Benzodiazepines	12%	34%	
Nitrous oxide	0%	31%	6%
Poppers (Amyl nitrites)	8%	16%	1%

Drug use prior to incarceration among Ontario prisoners (2009)

- 500 men in Ont. prison - past year use of opioids/cocaine/meth: 57% used (22% injected):
 - Opioids other than heroin: 35% (30% injected)
 - Heroin: 7.4% (60% injected)
 - Cocaine powder: 38% (25% injected)
 - Crack cocaine: 29% (10% injected)
 - Methamphetamine: 6% (23% injected)
- Context: In Ontario prisons, 60% on remand

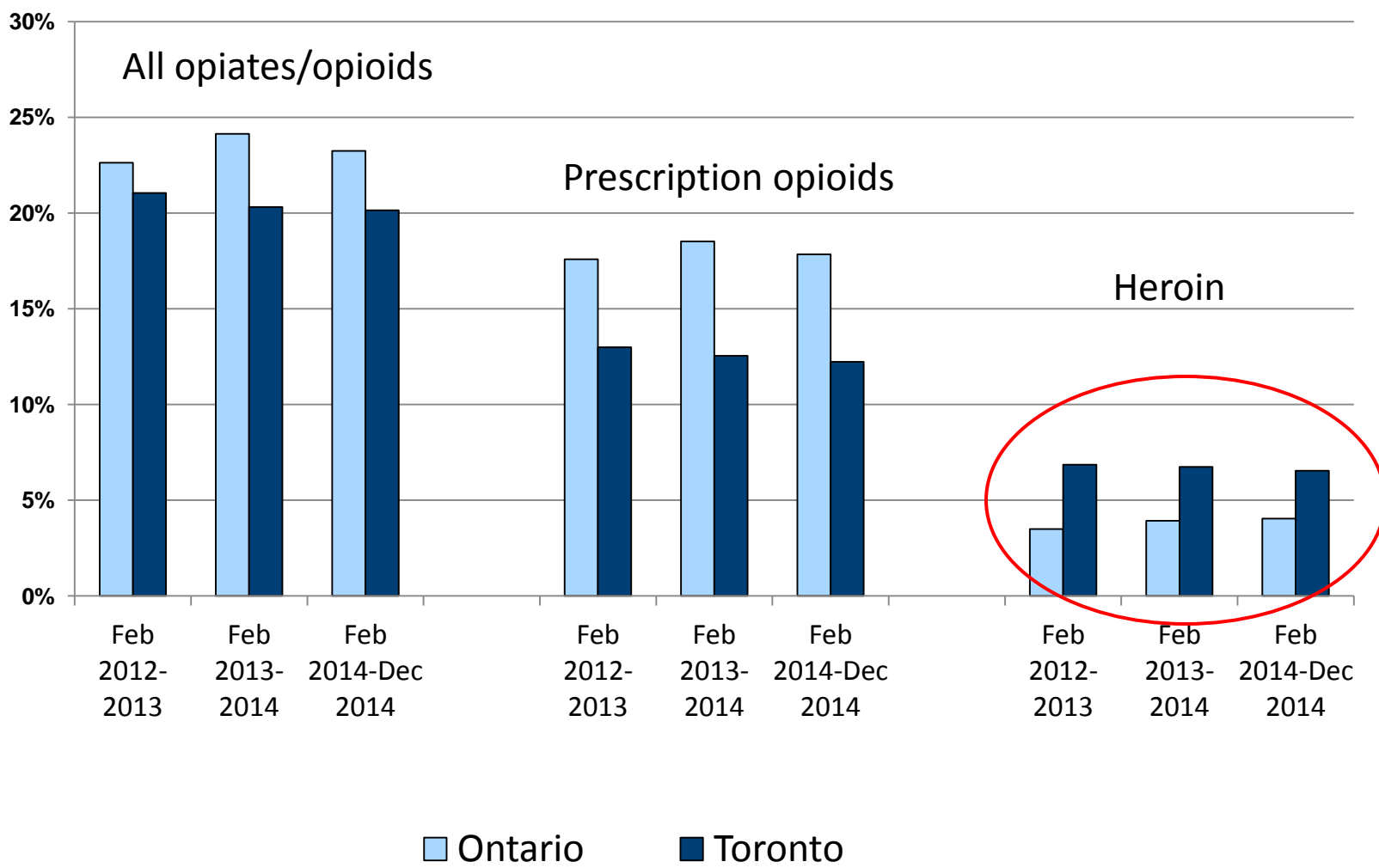
Treatment admissions: Presenting problem substances noted at intake (Toronto residents 2012-14)



Source: Drug and Alcohol Treatment Information System (DATIS), Centre for Addiction and Mental Health, 2014

Opioids as % of treatment admissions,

Ontario and Toronto, Feb. 2012-13, Feb. 2013-14, Feb. – Dec. 2014



Source: Drug and Alcohol Treatment Information System (DATIS), Centre for Addiction and Mental Health, 2014

Methadone/OST prescriptions among Toronto residents (new admissions)

- 2013-14: 772 (6.5%)
- 2012-13: 716 (6%)
- 2011-12: 619 (5%)



Naloxone: POINT Program (TPH)

- 1400 prescriptions (since Aug. 2011)
- 225 reported* naloxone administrations



*Underreporting likely

Source: The Works, Toronto Public Health, current as of Feb. 2015



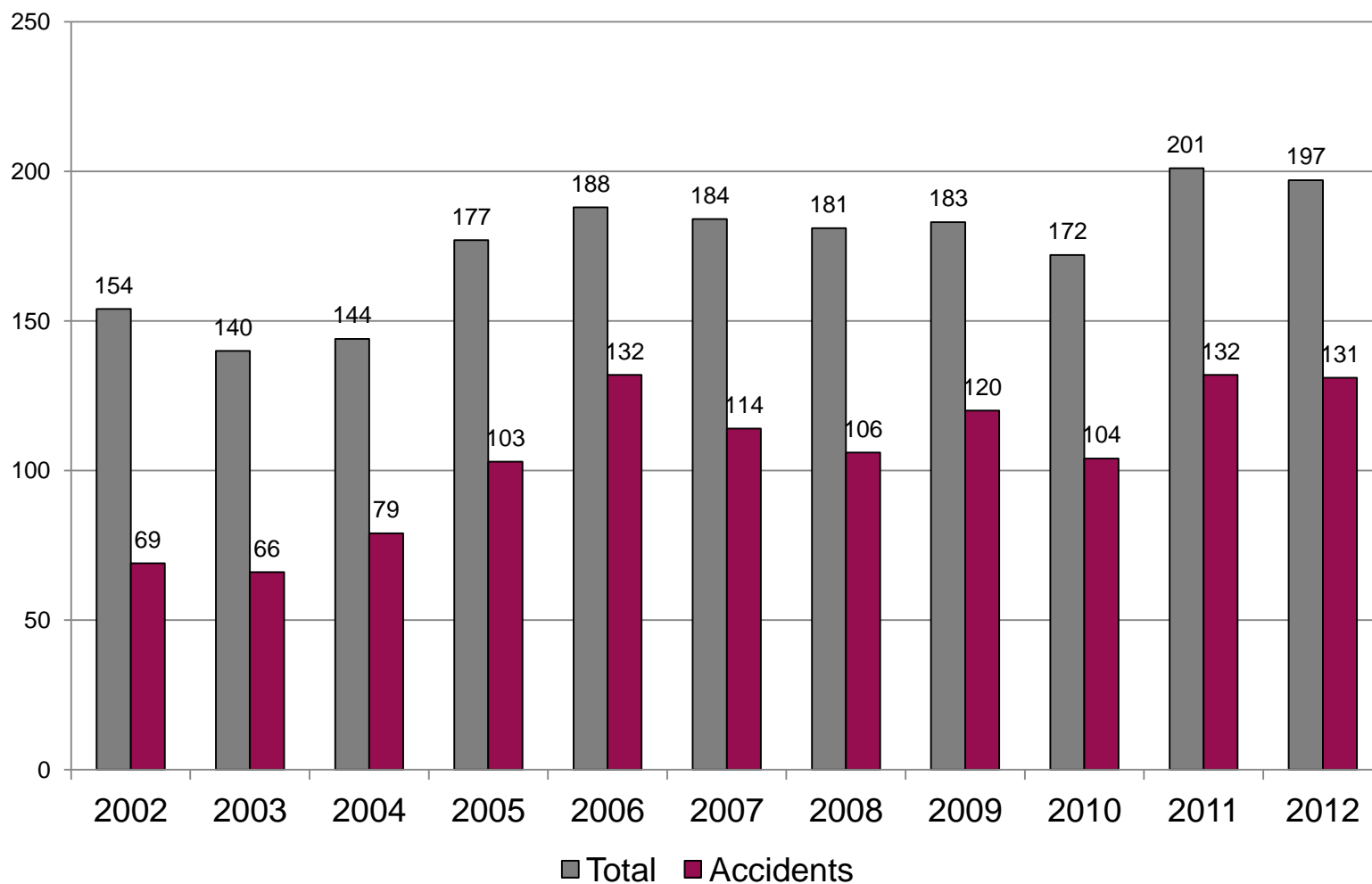
Toronto drug-induced deaths

(Preliminary data only)

Toronto drug-induced deaths

- Consistent across years 2002-2012:
 - Average age of death: mid-40s
 - 2/3 male to 1/3 female
 - Half caused by a single drug, and half by toxic combinations
- Opiates/opioids most frequent cause of death in 2002-2010 data
 - Mostly accidents
- Data from 2011-2012 not fully analysed, however accidental deaths continue to rise

Accidental deaths (preliminary data), shown with total drug-induced deaths



Drug-induced deaths among Toronto residents, 2002-2010

Note: Includes accidental deaths, suicides and undetermined death types

Most frequent drugs/drug types	Number of deaths caused by:		Total**
	Single lethal drug	Lethal drugs in combinations*	
Opiates/opioids	296	495	791
Cocaine	158	211	369
Antidepressants/antipsychotics	125	215	340
Alcohol (ethanol)	67	213	280
Benzodiazepines	13	218	231
Diphenhydramine	22	80	102
Acetaminophen	33	20	53
Non-palatable alcohol, solvents, volatiles	23	16	39
Hallucinogens	10	15	25
Stimulants other than cocaine	5	10	15
Total deaths	807	716	1526

*Note: Combination deaths include multiple drugs/types so total drugs is more than total deaths.

**Missing data for 3 deaths.



Ongoing issues

Ongoing issues

- Heroin, heroin, heroin...fentanyl?
 - Different types of heroin reported - ongoing
 - Adulterants, e.g. powdered fentanyl, others???
 - Overdose incidents, some deaths
- Contaminants/adulterants, e.g. cocaine:
 - Levamisole: Ongoing cases of vasculitis, neutropenia
 - Phenacetin


Cocaine adulterants

- Jan. 2013 – April 2014: Cocaine-positive GTA urine screens (*Dr. Shaun Hosein and St. Michael's Hospital*)

→ Results:

Substance	Positive
Contaminated cocaine	33%
Cocaine + levamisole	31%
Cocaine + phenacetin	8%
Cocaine + phenacetin + levamisole	7%

Phenacetin

- Toronto police seizure Jan. 2014:
 - 25 kg of cocaine, 24 kg of phenacetin (*likely intended as a cutting agent*)
 - Withdrawn from the Canadian market 1973
 - Caused renal/kidney failure (interstitial nephritis)
 - Caused cancers: Renal, pelvic, ureter
-  **Long-term** harmful impacts

Ongoing issues...

- Wellbutrin/bupropion:
 - Injection causing infections (long-lasting)
 - Inhalation/snorting dangerous – hospital EDs, some deaths; Ontario Coroner alert issued May 2013



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Interim Chief Coroner's Alert to Ontario Physicians and Pharmacists

To: Members of CCFP, CPSO, OMA, and OCP
From: Dr. Dan Cass, Interim Chief Coroner for Ontario
Subject: Lethal consequences from the recreational use of the antidepressant bupropion (Wellbutrin®, Zyban®) through inhalation and/or injection

- New psychoactives: little data, rely on reports from harm reduction workers, others

Seized NPS (novel psychoactive substances), Drug Analysis Service, Health Canada

	2005	2006	2007	2008	2009	2010	2011	2012	2013
2C family	6	66	47	85	180	267	481	869	693
Salvia		9	8	4	20	36	25	22	45
Tryptamines	14	8	127	249	161	74	1024	698	314
BZP/TFMPP		8	151	1161	2366	1921	2680	3777	2214
Alpha-PVP								22	512
MDPV						13	268	1358	621
Mephedrone						10	7	18	11
Methylone					1	7	3	54	481
Synthetic Cannabinoids					2	88	59	70	396

Source: Dr. Shaun Hosein (Ont. Poison Centre, University of Toronto, University of Calgary) from presentation to Cocaine Overdose Forum, July 21, 2013, South Riverdale Community Health Centre

Contact



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I-Track source info.

1. Toronto I-Track Report: Enhanced surveillance of Risk Behaviours and Prevalence of HIV and Hepatitis C among People Who Inject Drugs, Challacombe, L., Feb. 2013 (*data collected Jan-April 2011*)
2. I-Track: Enhanced surveillance of HIV, Hepatitis C and associated risk behaviours among people who inject drugs in Canada, Phase 2 report, PHAC (Millson et al), 2014 (*data collected Nov. 2006 – Jan. 2007*)

Health Canada study info.

- Health Canada (2014). Monitoring of Alcohol and Drug Use Among High-Risk Populations Study (HRPS), Oct. 29, 2014.
 - Street-Entrenched Adults Drug Users Prevalence Results 2012-2013
 - Street-Involved Youth Drug Users Prevalence Results 2012-2013
 - Recreational Drug Users Prevalence Results 2012-2013