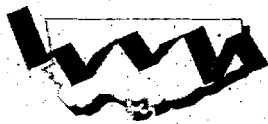


1995

Drug Use in Metropolitan



Toronto



Metro Toronto Research Group
on Drug Use

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
ACKNOWLEDGEMENTS	iv
INTRODUCTION	1
DATA SOURCES	2
FINDINGS	
Cocaine	8
Heroin	14
Cannabis	19
Sedative-Hypnotics & Tranquillizers	25
Hallucinogens	27
Solvents	29
Stimulants	31
AIDS	32
Special Studies	34
DISCUSSION	37
TABLES	38

Cocaine

- *Overview:* Survey, enforcement and mortality indicators remained relatively stable between 1993 and 1994. The most notable change occurred for treatment indicators. The percentage seeking treatment for cocaine, primarily crack, increased from 19.8% in 1993 to 26.2% in 1994.
- Crack cocaine remains the dominant drug in seizure activity, representing almost 40% of all drug seizures. In contrast to crack, seizures of cocaine HCl remain at levels lower than those found pre-1990.
- Thirty-two drug-factor deaths involved cocaine in 1993. This represents a drop from the record 39 deaths in 1992, although still relatively high for the period observed. Seventy-five percent of these deaths also involved heroin.
- Cocaine use among mainstream populations remains low, with less than 3% reporting its use.
- The percentage of ARF clients seeking treatment for cocaine increased overall (from 19.8% in 1993 to 26.2% in 1994) as well as among clients under 26 years (from 31.9% to 35.2%). This increase is primarily attributable to crack cocaine.

Heroin

- *Overview:* Of all the drugs monitored, heroin showed the greatest changes between 1993 and 1994. Purity and mortality indicators remained stable but high. Seizure and treatment indicators increased.
- Sixty-three heroin related deaths occurred in 1993, surpassing the record high of 60 deaths in 1992. This observed peak in deaths is partly accounted for by the high purity levels of heroin observed during the corresponding period.
- The average purity of heroin HCl seized in 1994 remained high (68%).
- Rates of heroin use among mainstream populations remain low, with under 2% reporting its use.
- Although heroin seizures account for only 9% of all drug seizures, the amount seized increased almost 400% between 1993 and 1994.
- The percentage of ARF clients seeking treatment for narcotics (namely heroin) increased from 6.2% in 1993 to 9.9% in 1994. This increase was especially sizable among clients aged under 26 years, whose heroin problems increased from 9.0% to 14.7%.

Cannabis

- While survey, treatment, and mortality indicators for Metro remained stable, there are signs of increasing marijuana use. Provincially there was an increase in reported use among grade 7 students in 1993. In addition there have been sizeable increases in quantities seized. Information provided by enforcement officers confirms this perception of increased use.
- Rates of cannabis use vary widely by population (9% of secondary school students, 10% of adults, 23% of university students and 83% of street youth). No substantial changes in use occurred.
- Only 7 of the 161 drug-factor coroner cases had cannabis in their systems, and in none of these was cannabis lethally related.
- The percentage of ARF clients citing cannabis as their major drug of choice remained stable between 1993 and 1994 at 6%.

Sedative-Hypnotics & Tranquillizers

- *Overview:* Survey and treatment data remained low and stable between 1993 and 1994; fatalities showed a small drop.
- Although the number of sedative-hypnotic deaths dropped to 78 in 1993 from 86 in 1992, sedative-hypnotic fatalities remain the most frequently found substance in coroner cases.

Hallucinogens

- *Overview:* All Metropolitan indicators remained stable between 1993 and 1994. However, provincial surveys and qualitative police information suggest increased activity regarding LSD.
- Use of LSD, the most widely used hallucinogen, remained low among mainstream populations (3% of secondary and 4% of university students). However, LSD use among street youth populations is substantially higher, with 59% reporting use in 1992.
- Seizures of LSD represent less than 1% of all drug seizures.
- Hallucinogens were not commonly cited as a primary drug problem among treatment clients.

HIV & AIDS

- As of October 31, 1994, 7,018 reports of HIV infection and 2,414 cases of AIDS were reported to the City of Toronto Department of Public Health. By far the highest risk category among those with AIDS was homosexual or bisexual behaviour among males, reported by 91% (2,191) of these individuals. Among this latter group, 90 had injected drugs in their lifetime. Injection drug use as a sole risk factor was reported by 49 people, or approximately two percent of all individuals diagnosed with AIDS.
- As of January 9, 1995, Toronto's Needle Exchange Program had accommodated over 64,000 client visits. Over 600,000 used needles have been turned into The Works in less than four years of operation. In addition, 9,800 kits for disinfecting needles have been distributed over this time period. The relatively low risk associated with injection drug use among those with AIDS in Toronto may be due to the success of the needle exchange program.

Newborn Hospital Discharge Data

- The records of infants born in Metropolitan Toronto hospitals between 1986 and 1993 were searched for evidence of prenatal drug exposure. Three categories of suspected drug induced damage were investigated: (1) suspected damage to fetus from drugs (2) noxious influences transmitted via placenta or breast milk, and (3) drug withdrawal syndrome in newborn of dependent mother. For the eighth consecutive year, the total number of newborns diagnosed with problems of these types increased.

ACKNOWLEDGEMENTS

There were many individuals and agencies involved in developing this edition of **Drug Use in Metropolitan Toronto**.

The following community leaders provided support and advice throughout the process:

Dr. Perry Kendall	Medical Officer of Health, City of Toronto
Mr. William McCormack	Chief, Metropolitan Toronto Police Force
Dr. James G. Young	Chief Coroner for Ontario
Mr. Mark Taylor	President, Addiction Research Foundation

The City of Toronto, Drug Abuse Prevention Program provided the financial resources and personnel to coordinate the Research Group.

The City of Toronto, Department of Public Health and the Addiction Research Foundation provided staff to collect and analyze the data, and to write the report.

The Chief Coroner of Ontario and the Metro Toronto Police provided data and assisted in their interpretation.

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The report was co-written by Ed Adlaf, Joyce Bernstein and Gordon Walsh. Production, release and distribution were co-ordinated by Michael Fay and Angie Lioni.

Thanks are also due to the following individuals who contributed their time in developing data for this report:

Mr. Maris Galitis	Ontario Ministry of Health
Ms Vita Sinuk	City of Toronto, Department of Public Health
Ms Carol Paulsen	City of Toronto, Department of Public Health
Ms Theresa Chong-Low	City of Toronto, Department of Public Health

Any views or interpretation of data in this document are those of the Metro Toronto Research Group on Drug Use, and do not necessarily reflect those of any individual or participating agency.

INTRODUCTION

About this report

The use of illicit drugs is one of the most difficult problems facing our communities. The situations in which drug use takes place, the types of drugs and modes of use are as diverse as the users themselves. The consequences of drug use are also wide reaching, from the physical harm to users, to the many forms of violence surrounding use, affecting users and non-users alike. Not surprisingly, there is also significant controversy with respect to the many proposed methods of dealing with these issues, ranging from harsher penalties for use to harm reduction strategies to proposals for legalization of selected substances.

Because of the complexity of these issues, a single survey or data set cannot adequately describe the patterns of drug use in a given area. This report, the fifth in the series DRUG USE IN METROPOLITAN TORONTO, summarizes information on illicit drug use in Metro, obtained from a wide variety of sources. By combining data from surveys of both adults and students, law enforcement, treatment facilities, death data, hospital discharges and several other sources, many facets of the drug use problem can be better understood. Annual updates to the report combine newly obtained information with that previously collected, facilitating early recognition and analysis of emerging trends.

This report intentionally focuses on illicit drug use. Other publications detailing municipal or county-level data for legal substances already exist,* while data pertaining to local illegal drug use have traditionally been scant and disorganized. Drug Use in Metropolitan Toronto is an attempt to coordinate the existing data and thus provide a more complete picture of illicit drug use in Metro. As well as organizing existing data, this report also presents a number of new results, unavailable in other sources.

About the Metro Toronto Research Group on Drug Use

This report was produced by the Metro Toronto Research Group on Drug Use. This group was established in 1990 by the City of Toronto, Department of Public Health to coordinate the collection of useful data pertaining to drug use at the local level. These reports use information from multiple sources represented by both the member organizations (see pages iv-v) along with outside contributors.

In addition to these annual reports, the Research Group meets regularly to coordinate special projects and to share ideas concerning issues of local importance, related to drug use. This networking of local experts with a wide range of specialization will hopefully serve as a model for the development of parallel groups in other Canadian cities. A national feasibility test of this model is currently underway, using the approach developed by the Toronto group.

* See, for example, Ontario Profile: Alcohol & Other Drugs 1994, Editors, B. Williams, K. Chang & M.V. Truong, Toronto: Addiction Research Foundation (ARF), 1994.

DATA SOURCES

The discussion of individual drugs in the FINDINGS section of this report include data from the following sources:

Survey Data

Estimates of drug use among Metropolitan Toronto students are based on a subsample from the Addiction Research Foundation's (ARF) Ontario Student Drug Use Survey 1977-1993; estimates of drug use among Metro adults are based on the Ontario Adult Alcohol and Other Drug Use Survey 1977-1994; and estimates of drug use among Metro university students are based on a subsample (n=1645) of the Addiction Research Foundation's University Student Drug Use and Lifestyle Behaviours (1993). The estimates provided refer to the annual prevalence of drug use; that is, the reporting of drug use at least once during the 12 months before the interview. The following table provides information on the number of interviews and the approximate sampling error (a 95% confidence interval) for each survey.

STUDENTS			ADULTS		
Year	Interviews	Error	Year	Interviews	Error
1968	6447	±0.6	1977	543	±3.0
1970	6890	±1.0	1982	335	±3.8
1972	6641	±1.0	1984	336	±3.8
1974	3479	±1.4	1987	355	±3.9
1977	2106	±1.7	1989	386	±3.8
1979	1719	±2.0	1991	237	±2.9
1981	684	±2.9	1994	435	±2.8
1983	1037	±2.5			
1985	856	±2.7			
1987	931	±2.6			
1989	659	±2.6			
1991	855	±2.0			
1993	894	±2.0			

In addition to general population surveys, data describing drug use among a particularly high-risk group, Toronto street youth, are also presented. These data are derived from the ARF's Drifting & Doing: Changes in Drug Use Among Toronto Street Youth, 1990-1992. This study is based upon two surveys conducted with street youth (under 25 years of age) in Toronto. The first study interviewed 145 youth during February and March, 1990, while the second interviewed 217 youth in 1992 again during February and March. These findings were also included in Drug Use in Metropolitan Toronto, 1993.

Surveys of large general populations, such as those derived from household and student surveys, are perhaps the most feasible method to estimate the extent of drug use in the population-at-large. There are several important strengths of the survey method: it is based upon representative, random sampling; it captures the widest population of former and active drug users (unlike arrest and treatment data); and it can identify characteristics of users and high-risk groups. As depicted in Figure 1, survey indicators also have limitations. For traditional surveys, it is often difficult to capture hard-to-reach groups, such as the homeless and highly transitory populations. As well, surveys are prone to both intentional (e.g., under-reporting of drug use) and unintentional (e.g., memory loss) errors. Despite such limitations, surveys are still the primary method of establishing the extent of drug use and changes in the community-at-large.

Seizure Data

Seizure data were provided by the Metropolitan Toronto Police Force. In this report, seizures refer to the confiscation of illegal substances of any quantity made by any Metropolitan Toronto Police official. Seizures made by Royal Canadian Mounted Police and Custom officials are not included. This report is updated with drug seizures occurring between the third quarter of 1993 and the third quarter of 1994.

As with all indicators of drug use, enforcement indicators are influenced by several factors, including the size of the using and abusing population, drug availability, police priorities and resources, and public concern (see Figure 1).

Purity Data

Drug purity information, which refers to the purity of seized substances, is derived from Health & Welfare Canada.

Treatment Data

Treatment statistics were provided by the Clinical Institute of the ARF. The statistics presented in this report refer to the number of individuals who presented themselves for treatment through September, 1994. The focus of attention is the major drug problem cited by these clients. It is important for the reader to note that "major" problem does not imply sole problem. Many who seek treatment have problems with more than a single substance. Still, most who seek treatment are able to identify the substance that is currently causing them the most difficulty. These data from the ARF are used because detailed information concerning all individuals seeking treatment in Metro is not readily available. Thus, the data and trends refer only to clients seeking treatment at the ARF and may not reflect trends in other treatment centres.

Treatment data are useful indicators of problematic substance use. However, as depicted in Figure 1, the following factors must be considered: those who seek treatment represent only a proportion of those who use drugs; many with problems do not seek formal treatment and use other sources; changes in treatment seeking can be influenced not only by the pharmacological impact of the substance, but by changing societal attitudes regarding the social stigmatization of treatment, and changing resources. In addition, for some with multiple drug problems, determining the primary drug of abuse may be problematic.

Drug Deaths

The death data in this report, provided by the Office of the Chief Coroner of Ontario, span the period from January 1, 1986 through December 31, 1993. They include all "drug-factor deaths" during this period, that is, all coroner cases in which drugs, alcohol or other commonly abused substances (i.e. glue, solvents or aerosols) were determined to have directly caused death. A total of 1,189 drug-factor deaths occurred during this eight year period. Of these, 583 (49%) were accidental and 539 (45%) were suicides. Of the remaining 6%, or 67 cases, a distinction between accident or suicide could not be made conclusively.

This report focuses on those individuals in the coroner's case files who died with any of the following drugs in their systems: cannabis, cocaine, heroin, sedative-hypnotics, tranquillizers, hallucinogens, stimulants, and solvents.

The presence of a given drug in any of these cases does not imply that particular drug caused the death. For instance, 85 of these individuals died with cannabis in their systems. However, other drugs were also found to be present in all of these cases. We say only that SOME drug, or combination of drugs, caused each death.

Further information concerning drug lethality is found in Table 7. For each individual drug, this table breaks down the number of times a positive finding indicated either (1) the drug was the sole cause of death, (2) the drug contributed to a fatal drug combination causing death, or (3) the drug was not deemed to be lethal at the level found.

The cases under the various drug categories are NOT mutually exclusive. For example, in 1993, 63 individuals died with heroin in their system while 32 deaths revealed positive findings for cocaine. However, these two groups are not distinct, as 24 individuals had both heroin and cocaine in their bodies and, therefore, are counted in both the 63 heroin deaths and the 32 cocaine deaths.

Drug factor deaths can be further categorized by the type of substance or substances found in the body at autopsy. The table below illustrates such a breakdown for each year of interest.

SPECIFIC DEATH FACTOR BY YEAR OF DEATH									
	1986	1987	1988	1989	1990	1991	1992	1993	Total
Drugs Only	102	93	96	113	105	114	101	111	835
Alcohol Only	20	25	18	19	23	16	13	14	148
Drugs and Alcohol	19	21	22	19	24	21	27	21	174
Glue Abuse	0	0	1	0	0	0	0	1	2
Solvent Abuse	NA	NA	NA	NA	7	6	2	14	29
Aerosol Spray	NA	NA	NA	NA	NA	1	0	0	1
Total	141	139	137	151	159	158	143	161	1,189

One advantage of coroner data over those provided in surveys or patient interviews is they do not rely on the interviewee being willing and able to provide accurate information. Errors due to memory loss, inhibition or other factors do not affect these data, which provide valuable additional information to survey results. Still, like other indicators, drug-related deaths are influenced by several factors as depicted in Figure 1. Cases are selected for investigation by the coroner's office on the basis of specific criteria, which include the degree of suspicion surrounding the case. Although this may introduce a degree of subjectivity into case selection, the Coroner's Office notes that the criteria used in determining the need for toxicological testing remained constant during the reporting period. Thus, any trends observed over time should not be attributable to changes in case selection. Drug-related deaths can also be influenced by

the age and experience of users, drug availability, size of the abusing population, route of administration, drug-mixing, dosage and purity (Figure 1). Thus, the fact that more deaths occur involving a particular drug does not necessarily imply increased use of that substance, but rather, more dangerous use, due perhaps to changes in potency, modes of use, and so forth.

Special Studies

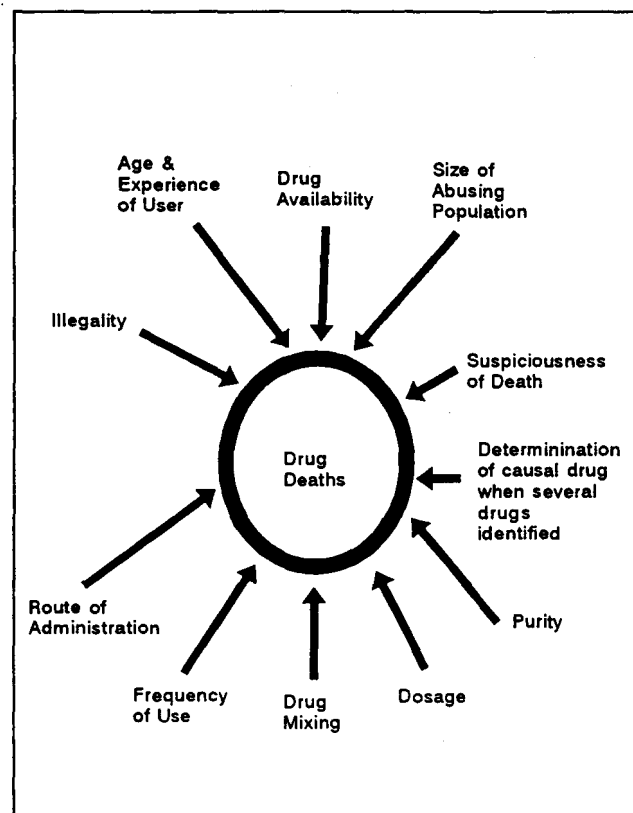
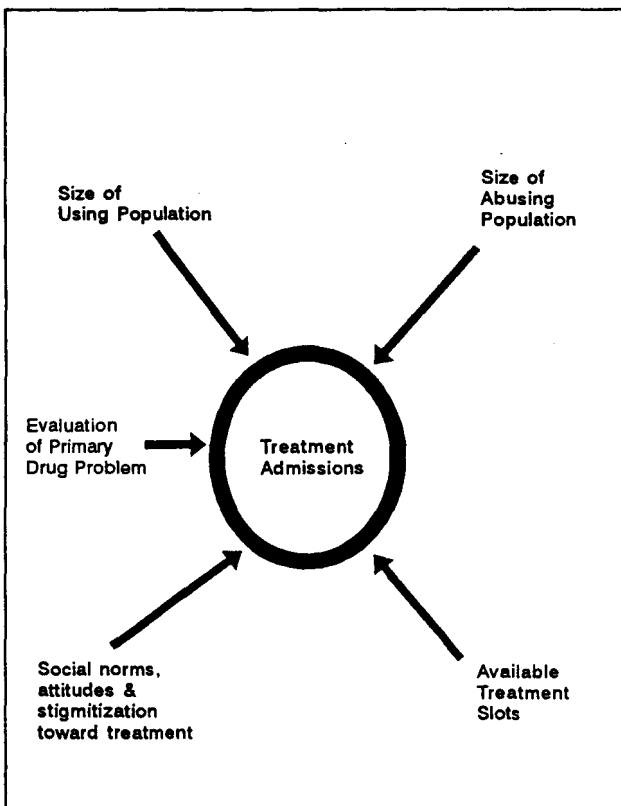
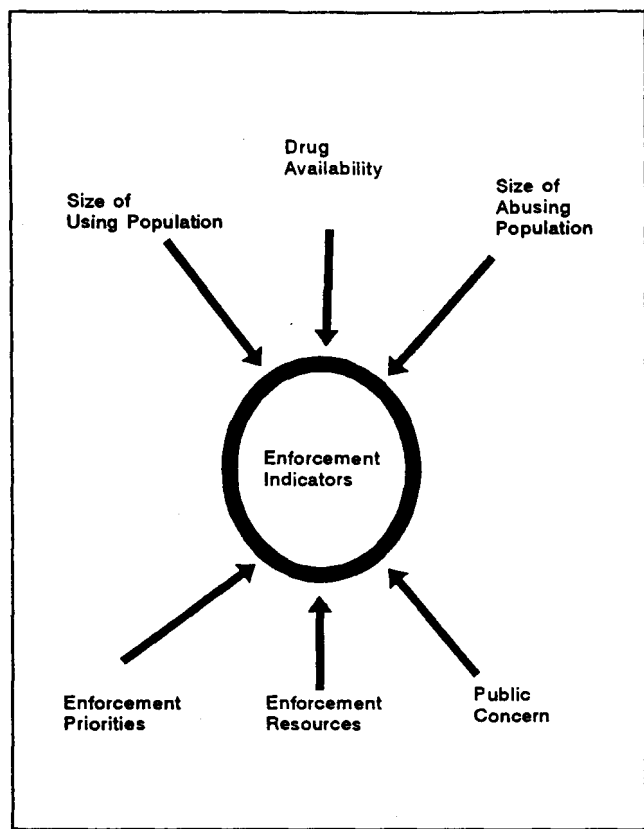
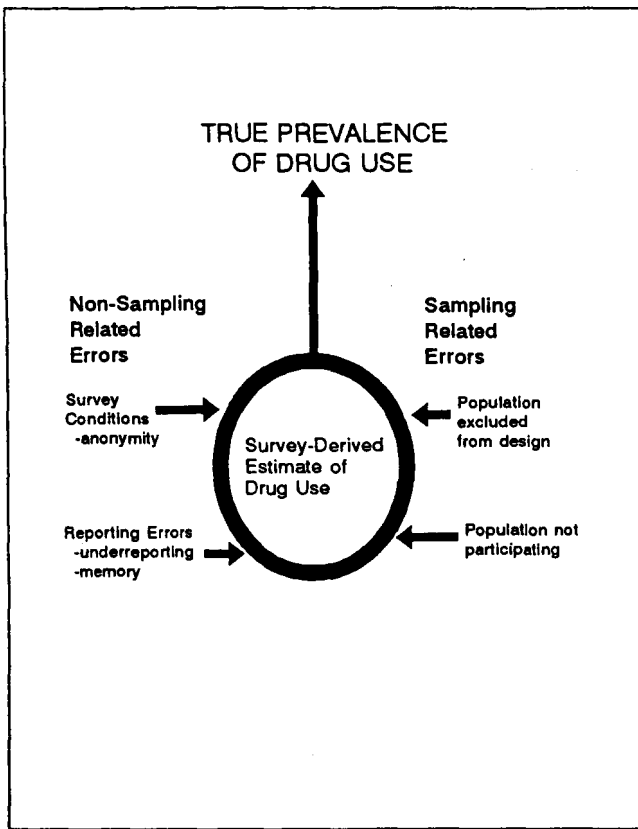
Data derived from additional sources are included in the final portion of the findings sections under the titles AIDS and SPECIAL STUDIES. These sources are described more fully in their respective sections.

Two main points should be evident after our discussion of drug use indicators.

First, all indicators have both strengths and weaknesses; indeed, no measure can be considered superior to another.

Second, different indicators are not proxies of other measures; each measures a unique and different aspect of the drug problem. Consequently, we should not expect all indicators to increase or decrease at the same point in time. For example, treatment indicators typically lag behind survey data. Those interested in a more detailed discussion of the strengths and weaknesses of drug use indicators can refer to Erich Goode's *Drugs in American Society* (4th Edition).

Figure 1
Dominant Factors Influencing Drug Use Indicators



FINDINGS

COCAINE

Survey Data

Table 1

Survey indicators of the general population show low rates of cocaine and crack use in Metropolitan Toronto. Recent surveys show a small decline in past year cocaine use among adults (from 1.8% in 1991 to 0.7% in 1994) and among secondary school students (from 2.4% in 1991 to 1.1% in 1993). A 1993 survey of university students found that 2.7% reported using cocaine. Use of crack cocaine among adults and secondary and university students remains below 2%.

Use of cocaine and crack, however, is substantially higher among street youth. A survey of street youth interviewed in 1992, found that 31% used cocaine, down from 64% in 1990; daily use showed a small drop from 6% to 3%. Both annual and daily use of crack remained similar between the two surveys (39% vs. 31% and 6% vs. 5%).

Enforcement Data

Tables 2A, 3 Figures 2-5

Although the number of cocaine HCl seizures shows a small increase during the first three quarters of 1994, this level is considerably lower than that recorded in earlier years. The number of grams seized also increased from 2,056 grams to 13,654 grams; however, this level is not substantially higher than earlier years. In the long term, seizures of cocaine HCl have declined dramatically since the first quarter of 1989 (824 seizures). Moreover, cocaine HCl now represents less than 10% of all drug seizures, compared to about 50% in the last half of 1988.

The decline in cocaine HCl has been replaced by crack cocaine, which currently represents about 42% of all seizures, up from 12% found in the second quarter of 1989. The quantity of seized crack cocaine was cyclical during the first three quarters of 1993, varying from 1457 to 3205 grams. The current quantity seized, however, remains substantially higher than it was in the early 1990s.

Regarding purity, the average purity of cocaine and crack during the first three quarters of 1994 was 69% and 84% respectively, unchanged from 1993. One noticeable trend regarding the purity of crack has been an increasing variation. In 1993 and 1994 the lowest purity levels were 13% and 24% respectively; however, between 1990 and 1992 the lowest purity level averaged 47%.

Focus group discussions with drug enforcement officers revealed the following about the character of cocaine use in Toronto.

As the quantitative data show, "crack is still by far the number one drug that we see; its a good four times more common than heroin."

"Right now the average purity of heroin has surpassed cocaine HCL and that's something did not happened until probably mid-way through this year [1994]. So the cocaine HCL that's out there has probably been stepped on a little more than it was in the past."

Regarding crack houses in Toronto: "There is a misconception of the crack house in Toronto compared to what you see on T.V. or in the States. It just doesn't exist. When people call and say there is a crack house next door I know the place that is vacant, renting cheaply or is a flop house. But it's not going to be the dungeons like they have in the States where it [crack] is manufactured and sold and they have armed people and lookouts outside, we don't get that."

Treatment Data

Tables 4, 5
Figures 6, 7

During the first three quarters of 1994 the percentage of ARF clients citing cocaine as their major problem of abuse was 26.2%, a 32% increase from the 19.8% found in 1993. A small increase in cocaine problems also occurred among clients under 26 years of age, (from 31.9% in 1993 to 35.2% in 1994). Discussions with therapists suggest that crack is largely responsible for bolstering cocaine's presence in these data. Among all treatment clients, cocaine ranks second to alcohol as the most frequently reported drug of abuse. Among young clients, however, cocaine is the number one problem of abuse. The percentage of Toronto clients citing cocaine as a primary problem (26%) is similar to cities such as Boston (28%) and Chicago (29%). However, the variation in cocaine problems in US cities ranges from 9% in Los Angeles to 65% in Atlanta.

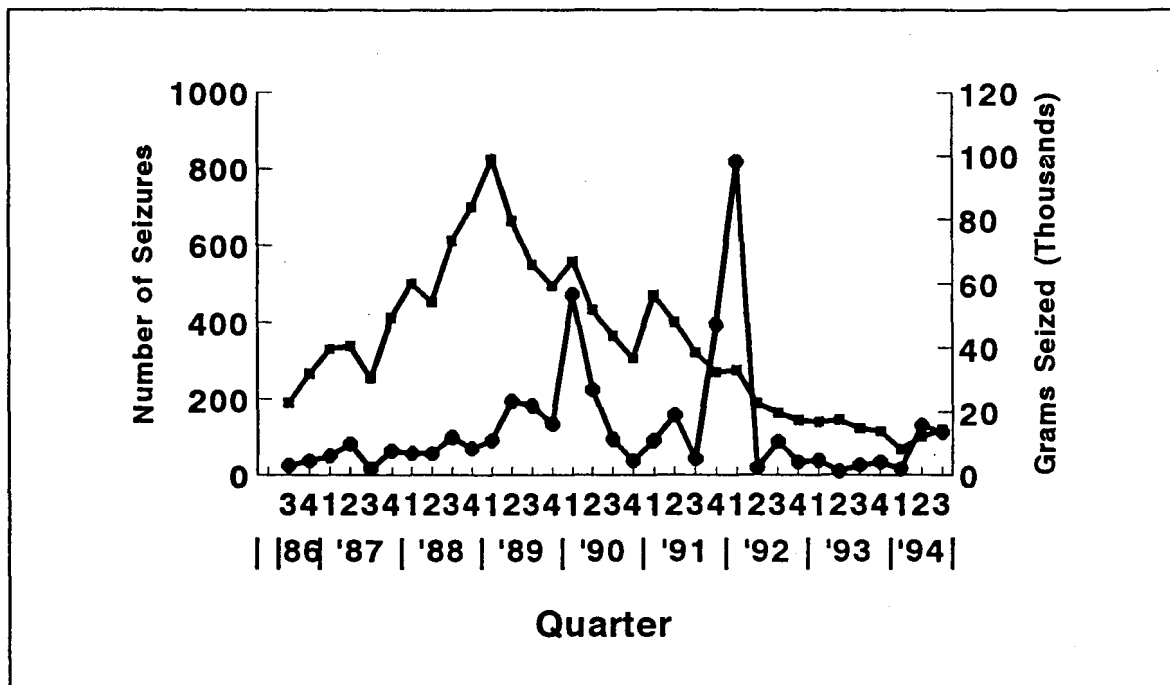
Drug-Related Deaths

Tables 6, 7
Figure 8, 9

Thirty-two of the 161 drug-related deaths in 1993 (20%; 1.3 per 100,000) had positive findings of cocaine, an 18% decrease from 39 deaths in 1992. Additionally, the percentage of cocaine cases in which cocaine was lethally involved dropped from 51% in 1992 to 19% in 1993. For the majority of cocaine-related deaths, cocaine was not the sole substance identified; 24 of the 32 deaths (75%) also involved heroin. Regarding classification of drug deaths, a total of 22 deaths (69%) were considered accidental, 4 were suicides and 6 were of undetermined origin. The 25 male and 7 female decedents averaged 39 years of age.

Compared to U.S. cities for which cocaine-related fatality data are available for 1992, Toronto ranks near the bottom of the roster. For example, Toronto's rate of 1.7 deaths per 100,000 is slightly higher than Minneapolis (1.4) and San Diego (1.6), but is far lower than rates in Miami (12.0), Detroit (12.5) and Philadelphia (22.0).

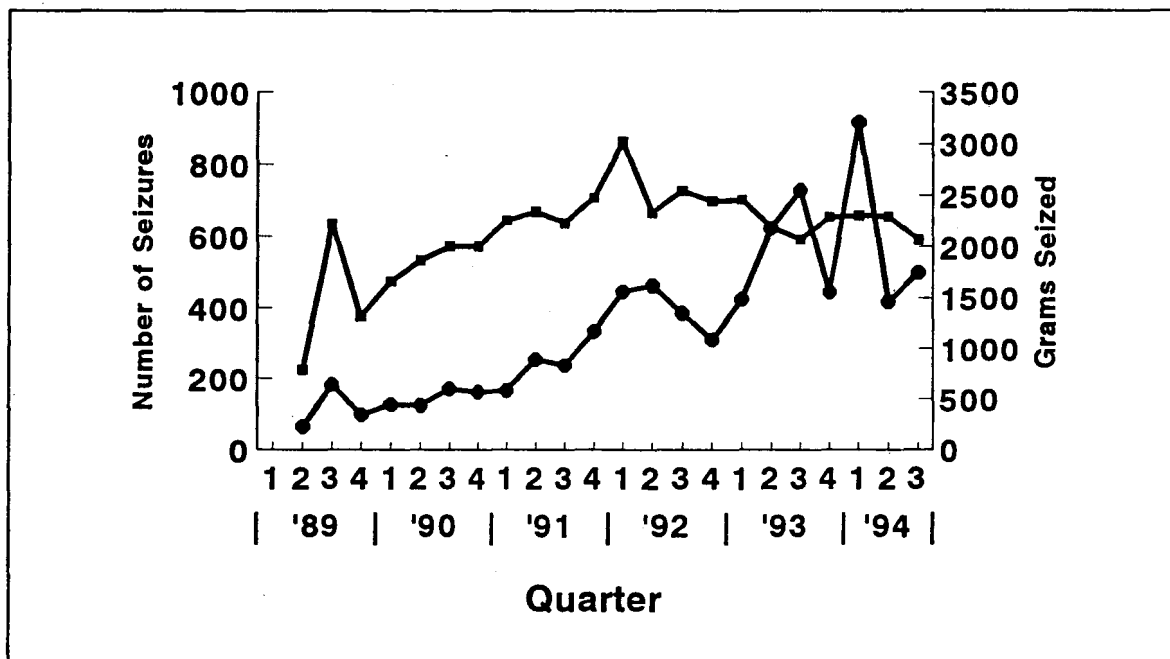
Figure 2
Seizures of Cocaine HCl



— Number of Seizures — Grams HCl Seized

See Table 2A

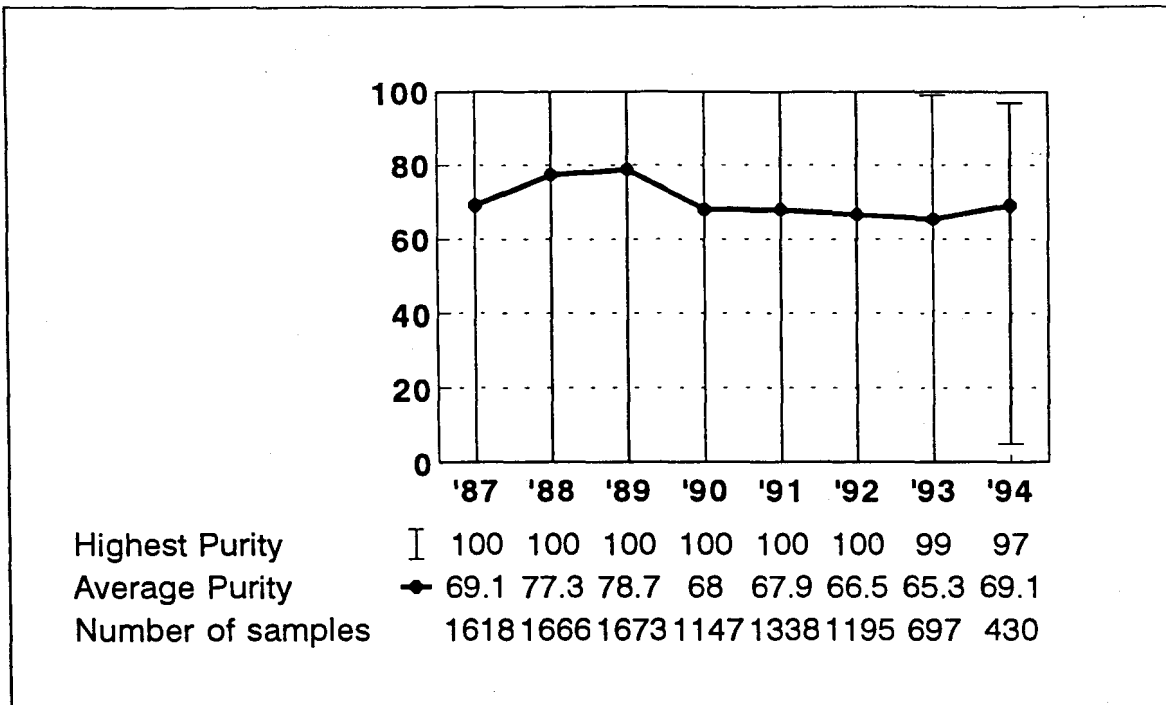
Figure 3
Seizures of Crack Cocaine



— Number of Seizures — Grams Seized

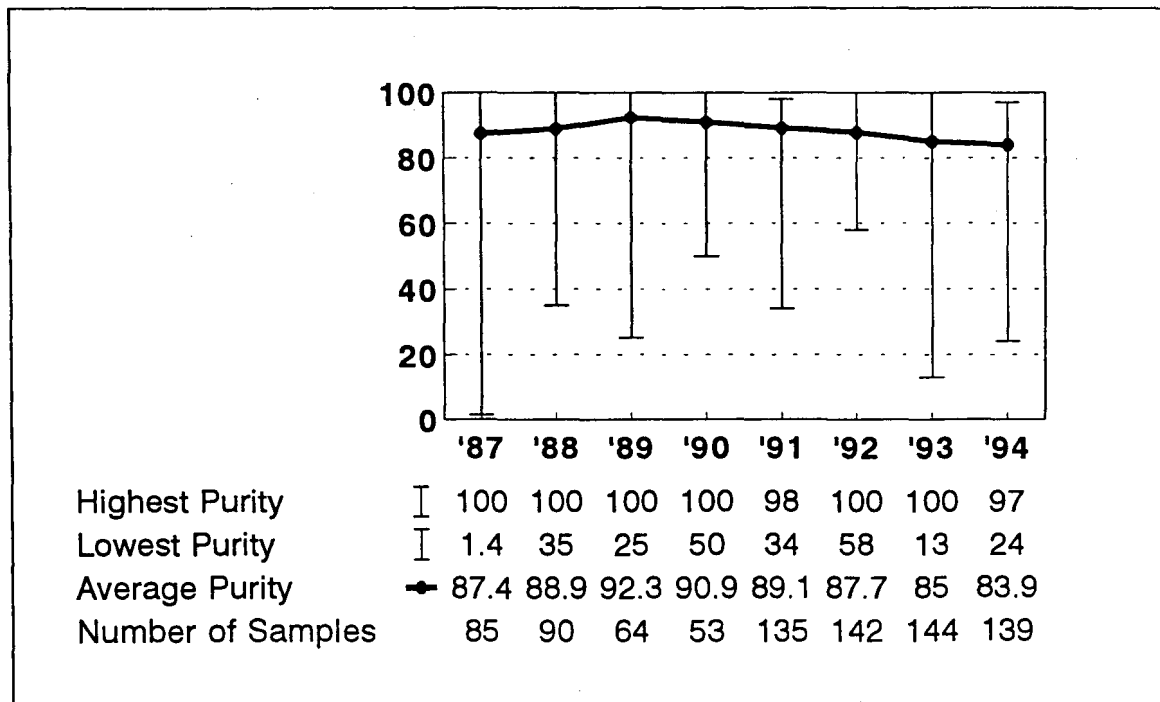
Monitoring began April, 1989
See Table 2A

Figure 4
Purity of Seized Cocaine HCl



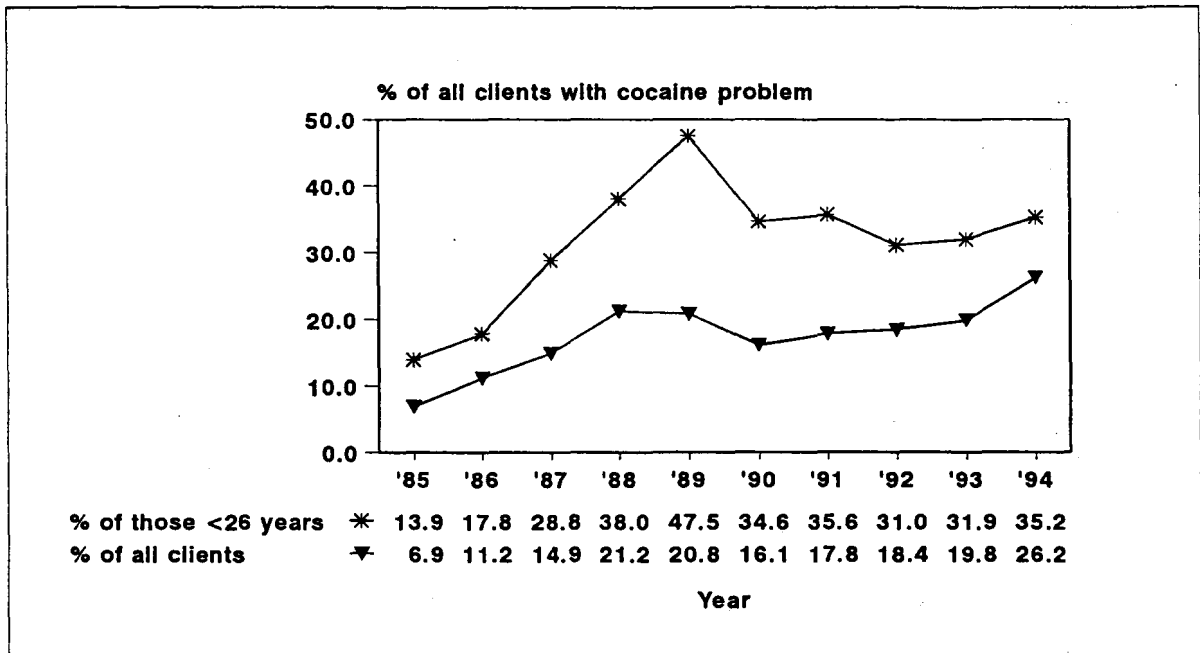
1994 data includes the months January through September only
 See Table 3

Figure 5
Purity of Seized Crack Cocaine



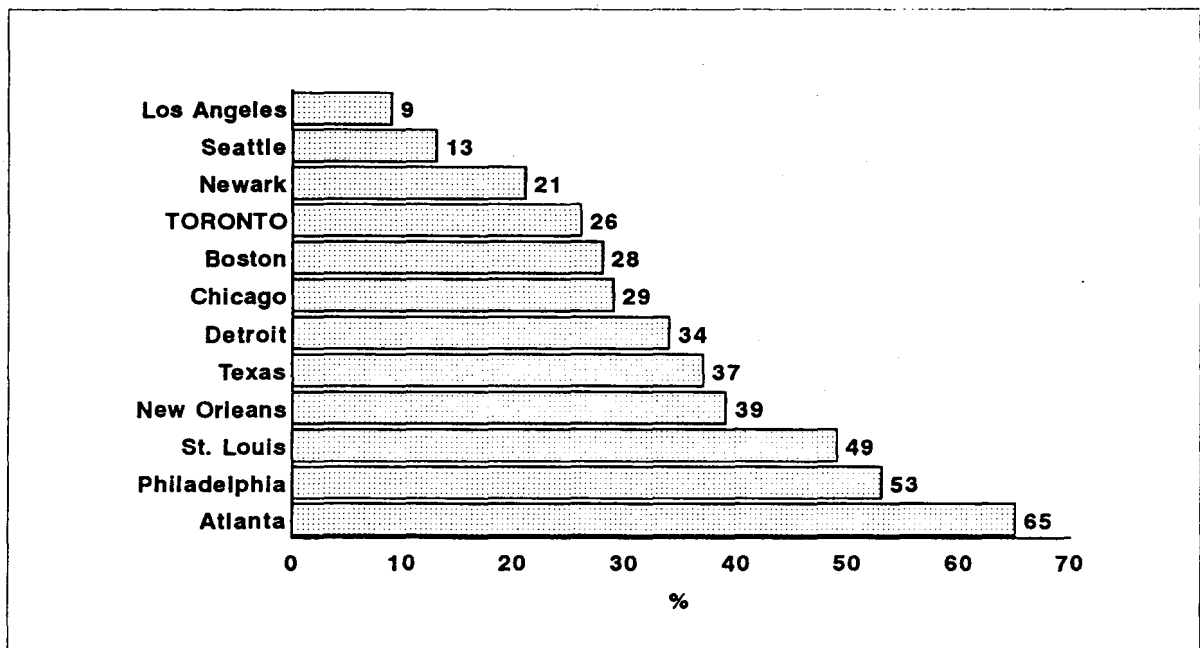
1994 data includes January through September only
 See Table 3

Figure 6
Cocaine as the Primary Drug Problem of ARF Treatment Clients



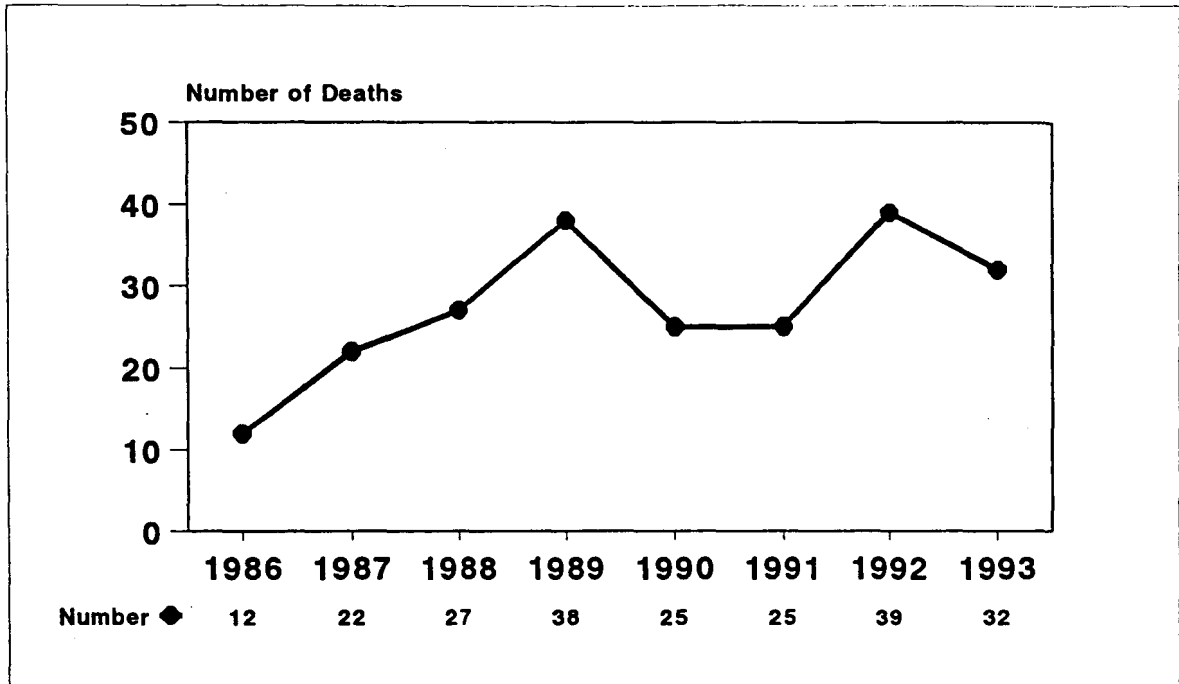
Percentages based on all cases including alcohol
 See Tables 4 & 5

Figure 7
Percentage of Treatment Admissions for Primary Cocaine and Crack Abuse (1993)



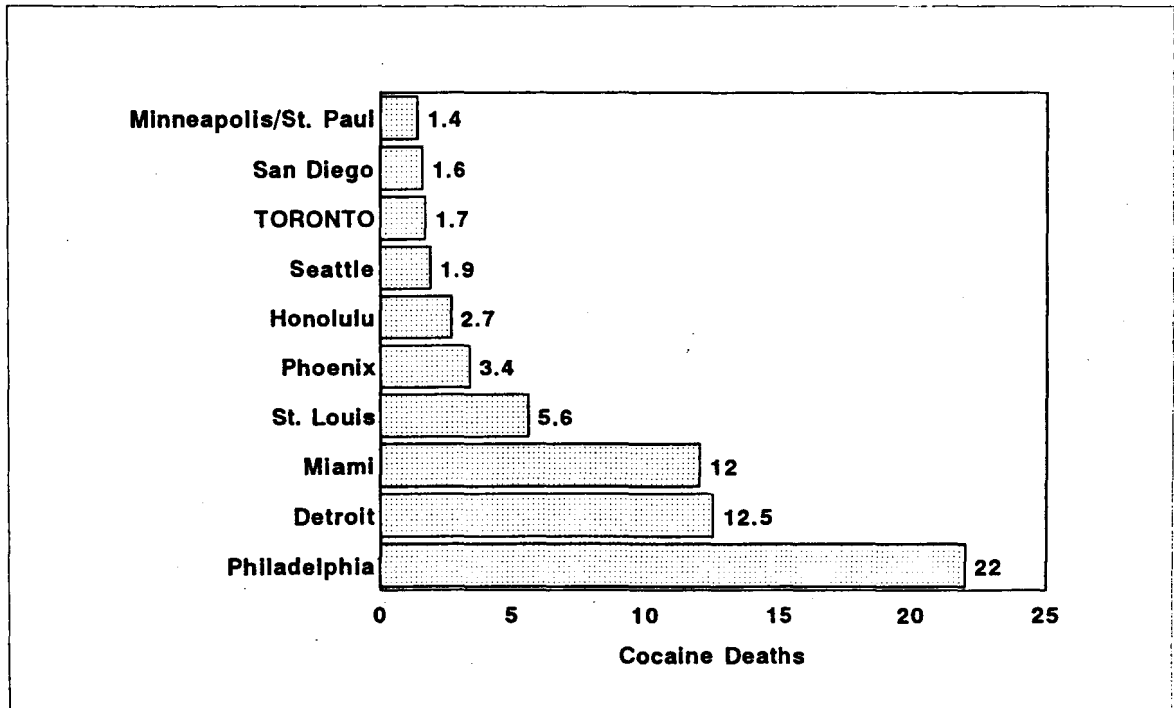
Source: CEWG (1994)
 Note: Percentages based on all cases including alcohol

Figure 8
Drug-Factor Deaths in Which Cocaine Was Detected



See Table 6

Figure 9
Number of Cocaine Deaths per 100,000 (1992)



Note: Drug-related includes deaths in which cocaine was present
 Source: CEWG (1993)

HEROIN

Survey Data

Table 1

Survey indicators of heroin use remain low among mainstream populations (under 2% for secondary and university students and the general adult population). Heroin use among street youth, however, is substantially higher, with 13% and 4% of Toronto street youth reporting heroin use in 1990 and 1992, respectively.

Enforcement Data

Tables 2A, 3 Figures 10, 11

Seizures of heroin for the first three quarters of 1994 show a sizeable increase with the number of grams seized increasing from 960 to 4,599 grams, a 379% increase. Moreover, the grams seized during the third quarter of 1994 is the highest recorded since 1986. Currently heroin seizures represent about 9% of all seizures, compared to about 4% prior to 1992. In 1994, the purity of seized heroin ranged widely between 17% to 98%, and averaged 68%, a small drop from the average of 72% in 1993, but substantially higher than purity levels found before 1993.

Focus group discussions with drug enforcement officers revealed the following about heroin in Toronto.

"A substantial amount of the heroin deaths take place in southwestern Toronto, .. or this is where the heroin was purchased. The overdoses have intimidated and scared the users. They are being told to be very careful and not to take too much."

"Some of the users and dealers who are using heroin, have been dying with needles in their arms and it's not because of the quantity it's the quality. The junkies from years ago are so used to a 20% to 30% pure heroin. Today if we get 80%, we're going "Oh, it's not that good." We're used to buying 90% pure and the users are not even aware of the purity because by looking at it they can't tell if it's 20% or 40% or 60%... Southeast Asian heroin dominated the market compared to Southwestern heroin... You can get 60% heroin that hasn't been stepped on. We used to find that more with the Southwest Asia heroin. The laboratory techniques don't seem to be as good in Southwestern Asia."

"There has been much more smoking of heroin because of the hysteria of the needle and the injection part of it. AIDS has also scared a lot of them ... Because of the purity of number 4 heroin coming from Southeastern Asia, it's a lot more accessible and easier to smoke."

"The price has been driven way down. Buying a hit of heroin is like buying a hit of crack cocaine which was unheard of. Four years ago I was paying \$450 to \$550 for a gram and the last one I bought was \$120. On the street I can negotiate a hit down to \$30. So that means a crack addict can say "why am I getting crack when I can get heroin for the same price?" The average price for 1 gram is about \$300 and \$40-\$50 for a hit on the street."

Treatment Data

Tables 4, 5
Figures 12, 13

Between 1993 and 1994 there was a small increase (from 6.2% to 9.9%) in the percentage of all ARF clients seeking treatment for narcotics (primarily heroin). The extent of narcotic problems in 1994 is not substantially higher than rates found between 1990 through 1992. More noticeable, however, is the trend that occurred among clients aged 26 and under. Among this group the percentage citing narcotics as their primary problem increased from 9.0% in 1993 to 14.7% in 1994. Moreover, narcotic problems among younger clients has been on an upward swing since 1991.

The extent of heroin problems among treatment clients can vary widely. In US cities the variation in heroin problems ranges from 3% in Atlanta to 70% in Los Angeles. The percentage of clients citing narcotics as a primary problem in Toronto (10%) is similar to cities such as Chicago, New Orleans and Texas (9%, respectively).

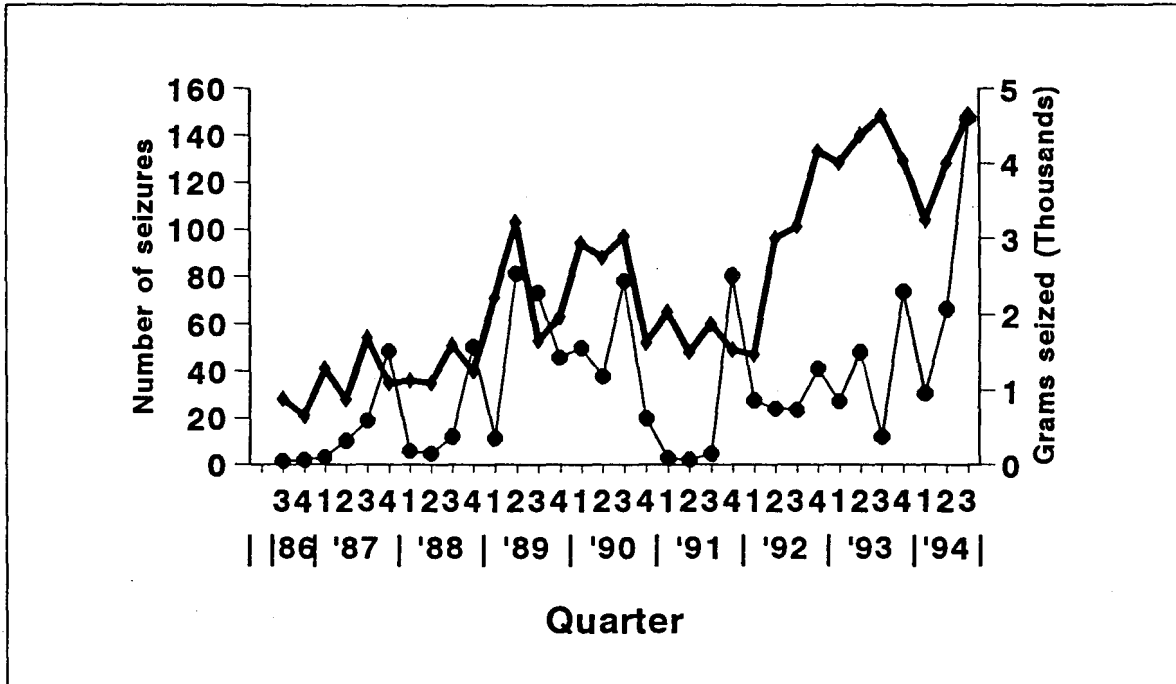
Drug-Related
Deaths

Tables 6, 7
Figures 14, 15

Sixty-three of the drug-factor deaths in 1993 had positive findings for heroin, surpassing the previous high of 60 deaths in 1992. The long-term increase is sizeable, with the number of deaths increasing from 12 in 1986 (0.5 per 100,000) to 63 in 1993 (2.5 per 100,000). Regarding classification of heroin-related deaths, 49 of the deaths (77%) were classified as accidental, 7 were classified as suicide and the remaining 7 were classified as unknown. The average age of mortality was 35 years. Forty-four (78%) of those who died were males.

Despite long-term increases in the number of heroin deaths, the fatality rate in Toronto in 1992 was near the lower end when compared to various U.S. cities. While Toronto's rate of 2.6 heroin-related deaths per 100,000 is higher than that for Minneapolis (0.4), Honolulu (1.1) and Miami (1.2), it is substantially lower than rates for San Diego (4.7), St. Louis and Detroit (5.6) and Philadelphia (10.1).

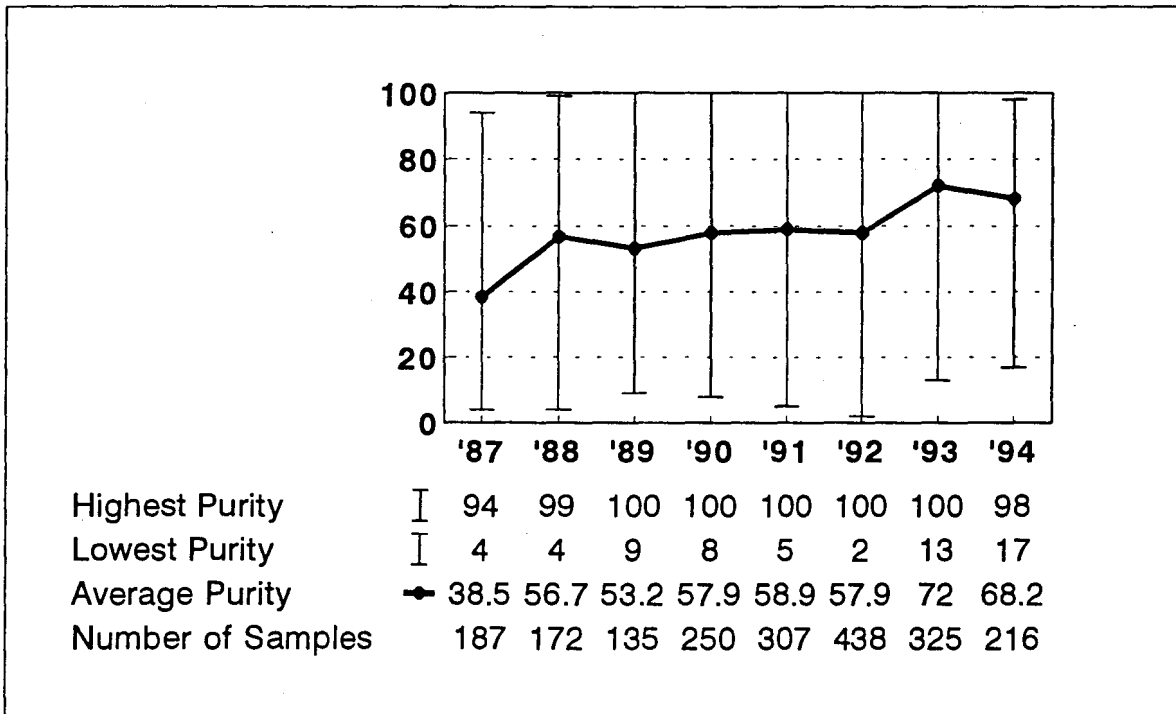
Figure 10
Seizures of Heroin



▲ Number of Seizures ● Grams Seized

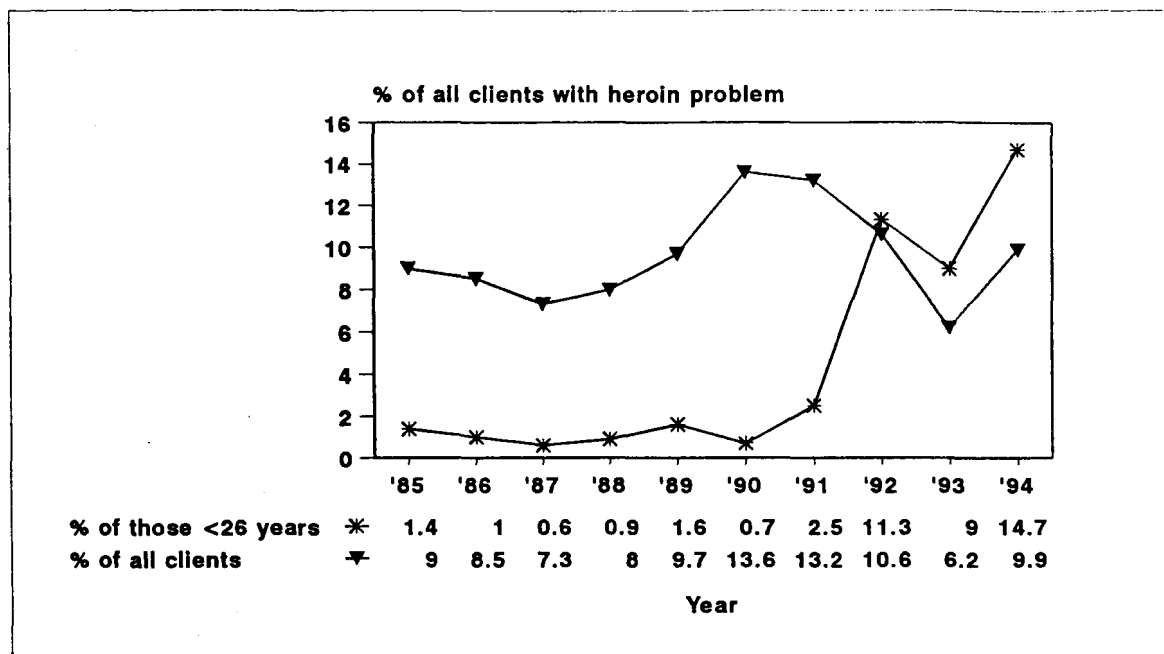
See Table 2A

Figure 11
Purity of Seized Heroin HCl



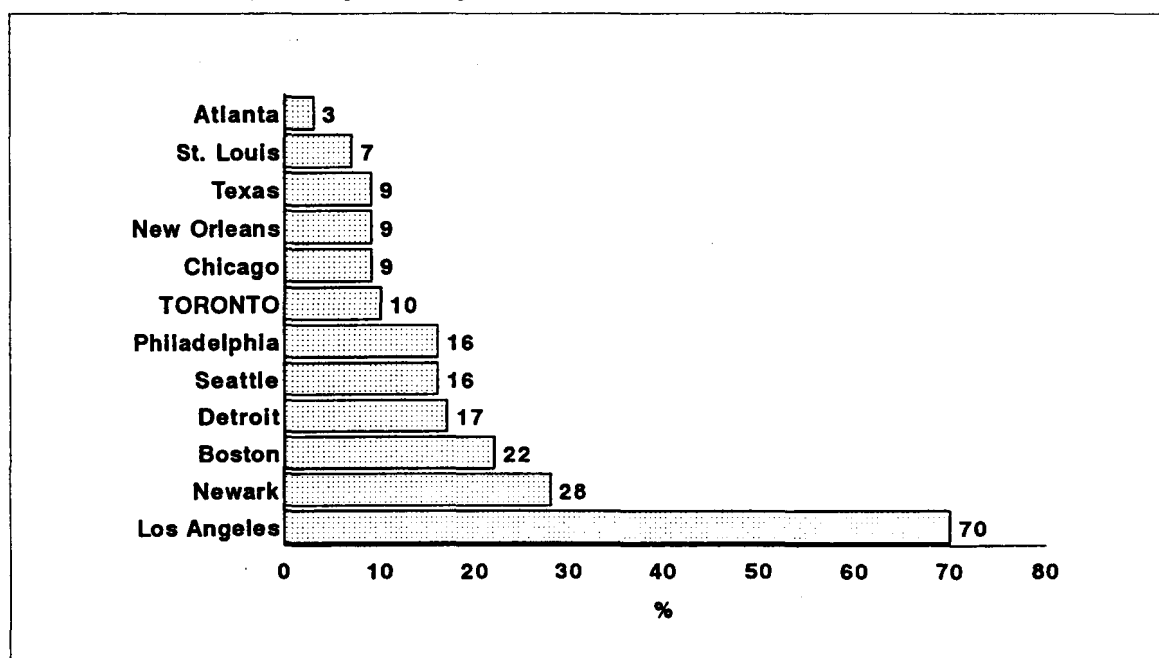
'94 data includes January through September only
See Table 3

Figure 12 Narcotics as the Primary Drug Problem of ARF Treatment Clients



Percentages based on all cases including alcohol
See Tables 4 & 5

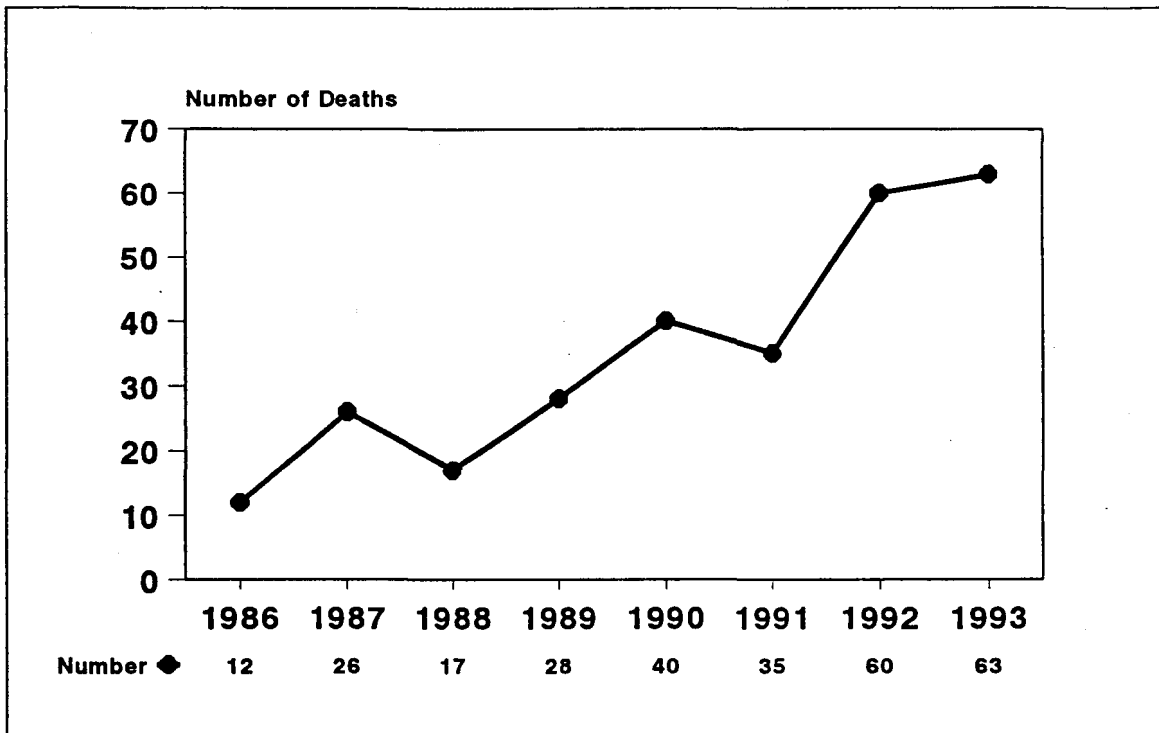
Figure 13 Percentage of Treatment Admissions for Primary Heroin Abuse (1993)



Source: CEWG (1994)

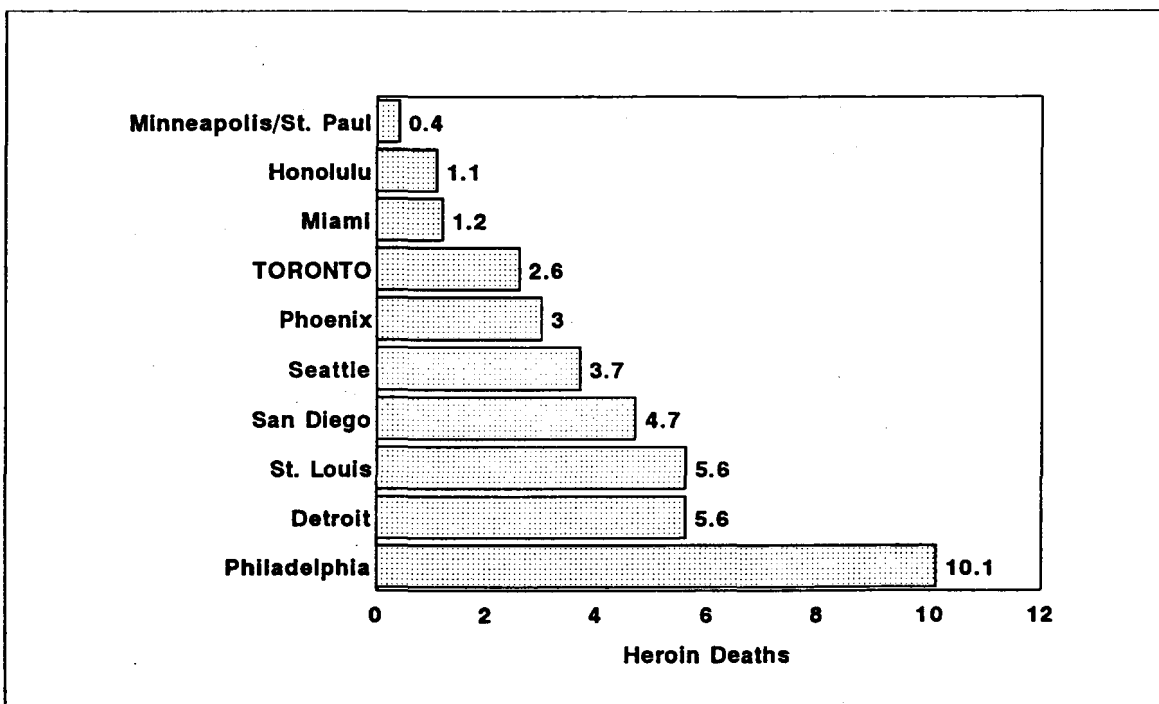
Note: percentages based on all cases including alcohol

Figure 14
Drug-Factor Deaths in Which Heroin Was Detected



See Table 6

Figure 15
Number of Heroin Deaths per 100,000 (1992)



Note: Drug-related includes deaths in which heroin was present
 Source: CEWG (1993)

Survey Data**Table 1**

The most recent survey results point to a modest decrease in the percentage of Toronto adults who used cannabis, from 12.3% in 1991 to 9.9% in 1994. Use among secondary school students remained stable, 10.1% in 1991 and 9.3% in 1993.

Provincially, the use of cannabis increased significantly among 7th graders from 0.7% in 1991 to 1.7% in 1993.

Past year cannabis use is substantially higher among university students (22.9%). Street youth report the highest rates of use, with 92% and 83% reporting use in 1990 and 1992, respectively. Among this group, however, daily use remained unchanged between 1990 and 1992 (16% vs. 15%).

Enforcement Data**Tables 2B, 3
Figures 16, 20**

During the first three quarters of 1994 seizures of marijuana have increased steadily while seizures of hash and hash oil have varied. The most dominant trend occurs for marijuana; the numbers of grams seized in the third quarter of 1994 (292,730) is the highest recorded since 1986. Of all seizures confiscated in 1994, marijuana accounts for about 25%, hash for about 9% and hash oil for about 1%. The purity of marijuana seized during the first three quarters of 1994 averaged 3.4%. (Purity data for other cannabis products was not available).

Focus group discussions with drug enforcement officers revealed the following about cannabis in Toronto:

Regarding recent increases in marijuana seizures: "We're not making more cannabis busts, we're getting bigger finds. We don't go out to buy a dime of weed anymore. There are fewer seizures but when you hit you hit large... Hydroponics is the big one, especially out in Northeastern Toronto... Basically our enforcement of marijuana is limited and most of the stuff coming in is from hydroponic labs... Northeastern Toronto is a very lucrative corner of the city for that [hydroponic labs] because of the vacant space."

Regarding increases in cannabis use: "It's back in the schools too, big time, I mean for the younger kids. The kids on the street dealing aren't school kids, they are dealing in the schools, marijuana is big because again, it is back in fashion. You know when everyone smokes it's like it's a cigarette and it's a cool thing again, ...I really think that it's more of a phase, it's recreational."

"I think the resurgence of marijuana is partially explained by high grade marijuana that is produced in Canada. For a long time half decent marijuana had to be imported. That's not the case anymore. There's no fear of importing it because it can be grown in their apartments, garages or open fields... They've got the expertise right now where they can manufacture high grade good quality marijuana.... Also, there is not as big a risk factor in buying marijuana as there is for the other narcotics. Even the dealer knows that if he gets caught it won't be that bad. They weigh out the pros and cons... The other thing with marijuana's popularity is the resurgence of an era. Right now with the kids, the 60's and 70's thing is back, the fashion is back, the music is back, so the weed's back. There is a misconception about marijuana. Purity levels can range from very mild to extremely hallucinogenic."

Treatment Data

Tables 4, 5
Figures 21, 22

The percentage of clients citing cannabis as their foremost problem remained at 6% in both 1993 and 1994. Rates of cannabis problems were similarly stable among clients under 26 years, but were at a higher level (17.3%).

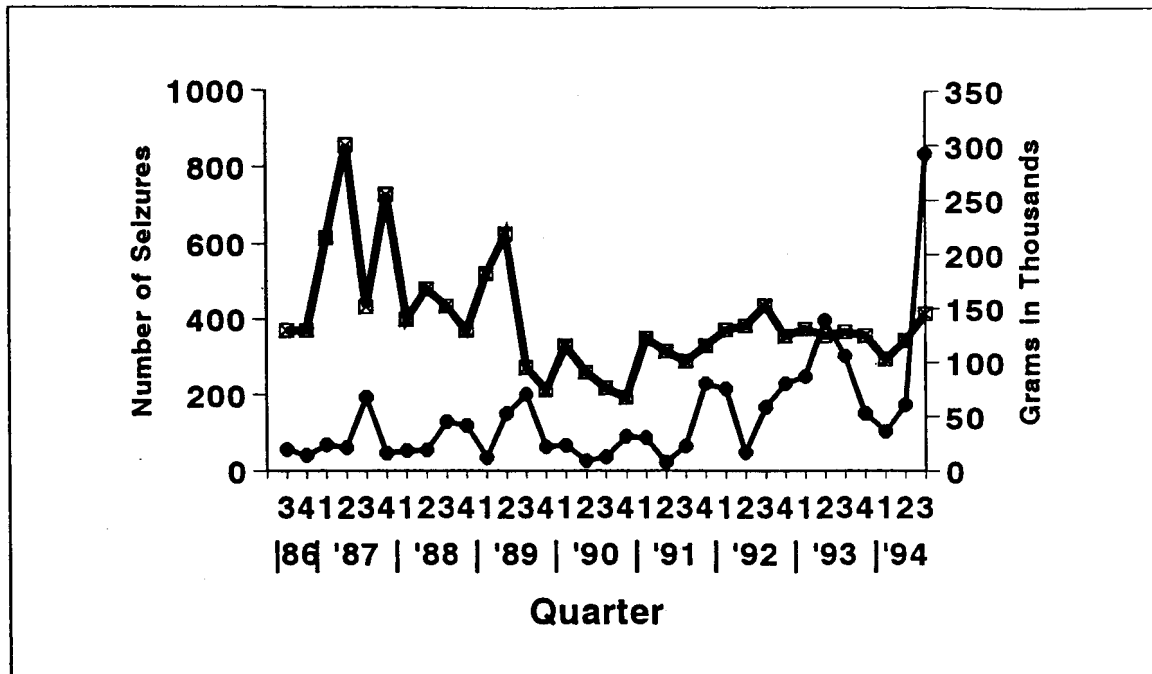
The extent of cannabis problems among treatment clients varies widely. In the US, rates of cannabis problems range from 1% in Atlanta to 15% in New Orleans. Cannabis problems in Toronto (6%) are similar to several U.S. cities including Seattle (6%), Philadelphia and St. Louis (4%, respectively).

Drug-Related Deaths

Tables 6, 7
Figure 23

The presence of cannabis in drug-related deaths remains uncommon. Cannabis was detected in only 7 of the 161 drug-related deaths that occurred in 1993 (0.3 per 100,000), a small decline from 11 deaths in 1992. As in previous years, cannabis was not lethally implicated; all 7 deaths were accidental and also involved heroin. The four male and three female decedents had an average age of 32 years.

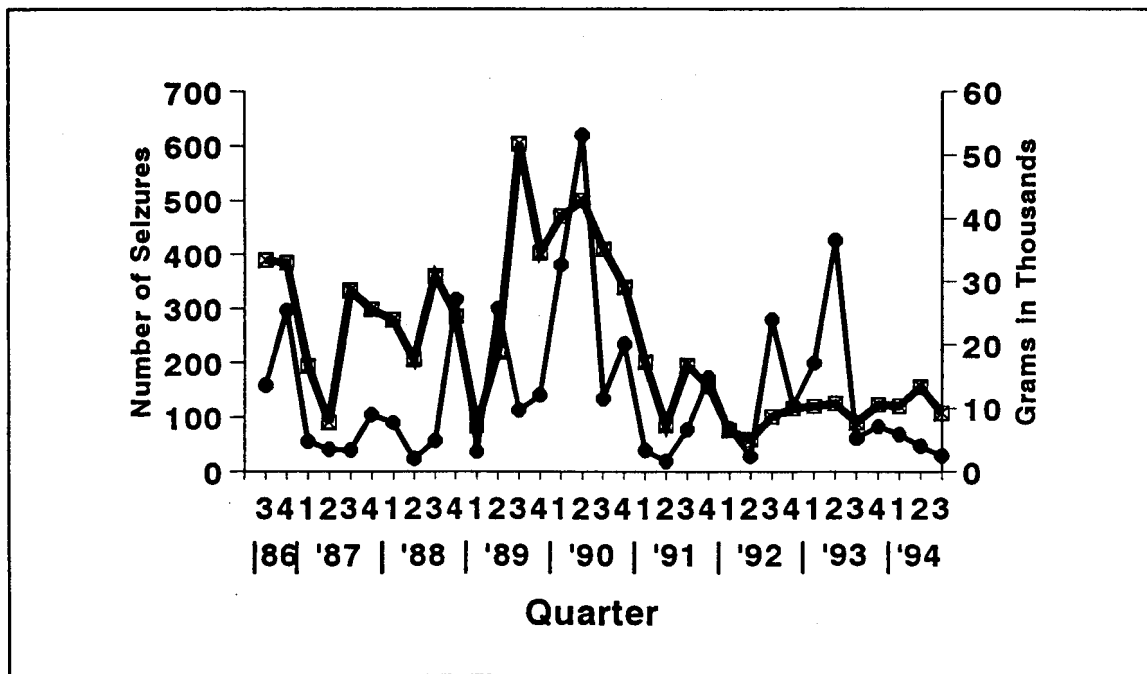
Figure 16
Seizures of Marijuana



■ Number of Seizures ● Grams Seized

See Table 2B

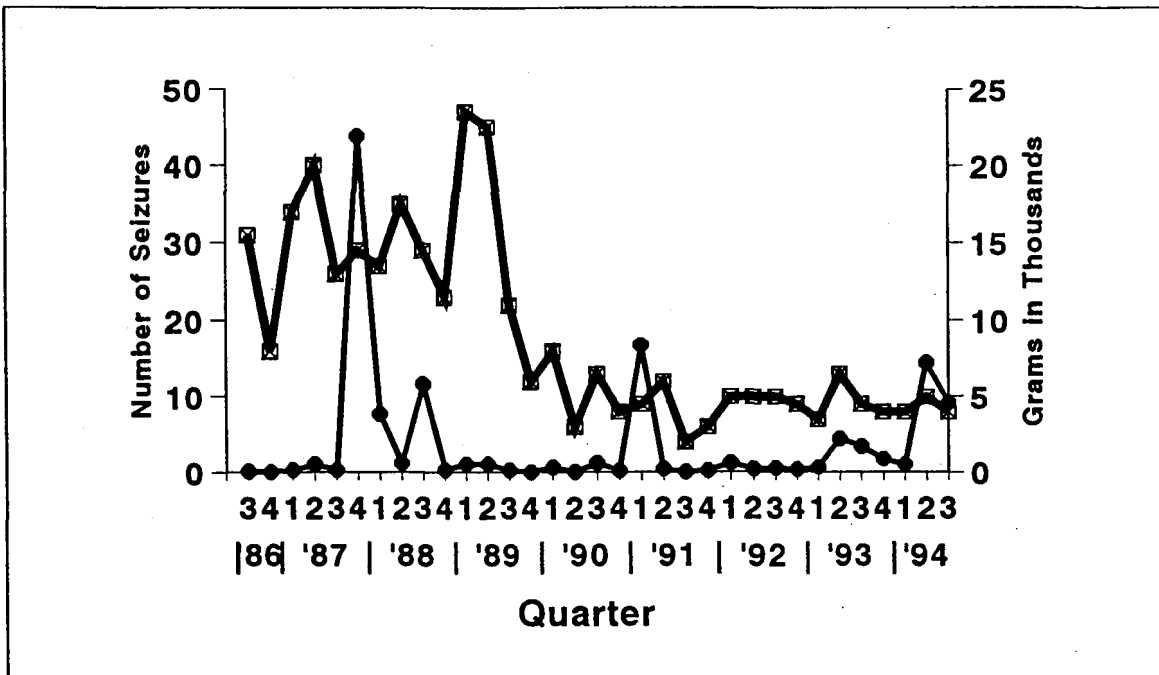
Figure 17
Seizures of Hashish



■ Number of Seizures ● Grams Seized

See Table 2B

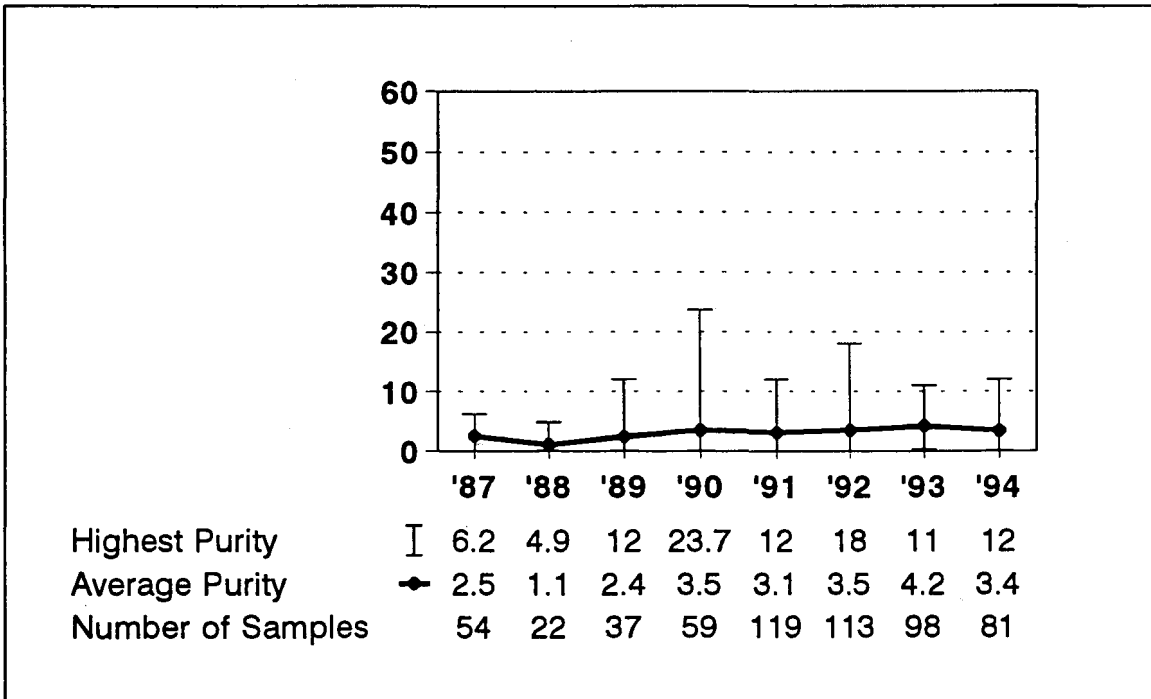
Figure 18
Seizures of Hash Oil



▣ Number of Seizures ● Grams Seized

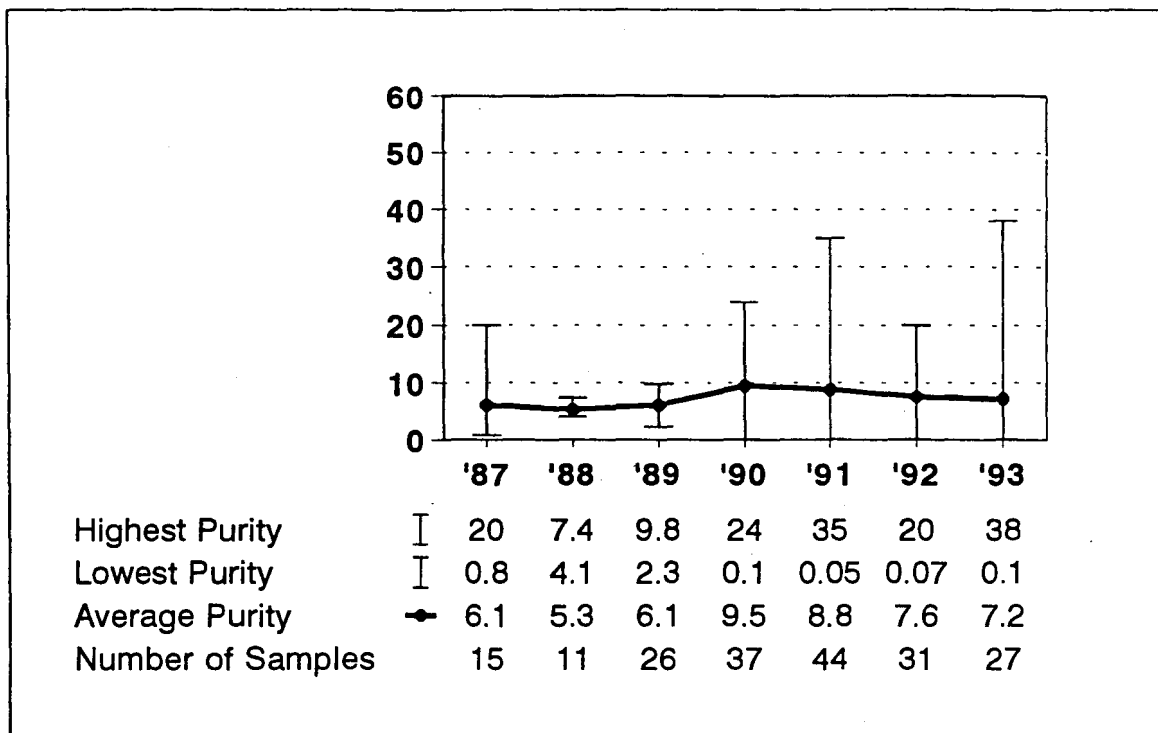
See Table 2B

Figure 19
Purity of Seized Marijuana



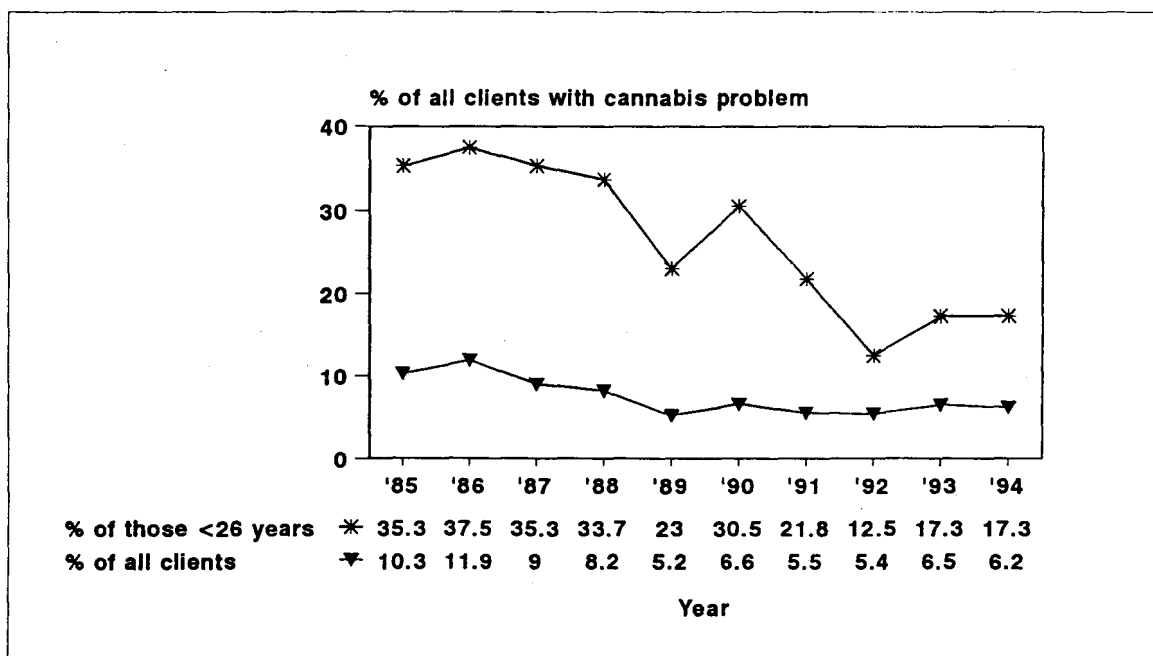
1994 data includes January through September only
See Table 3

Purity of Seized Hashish



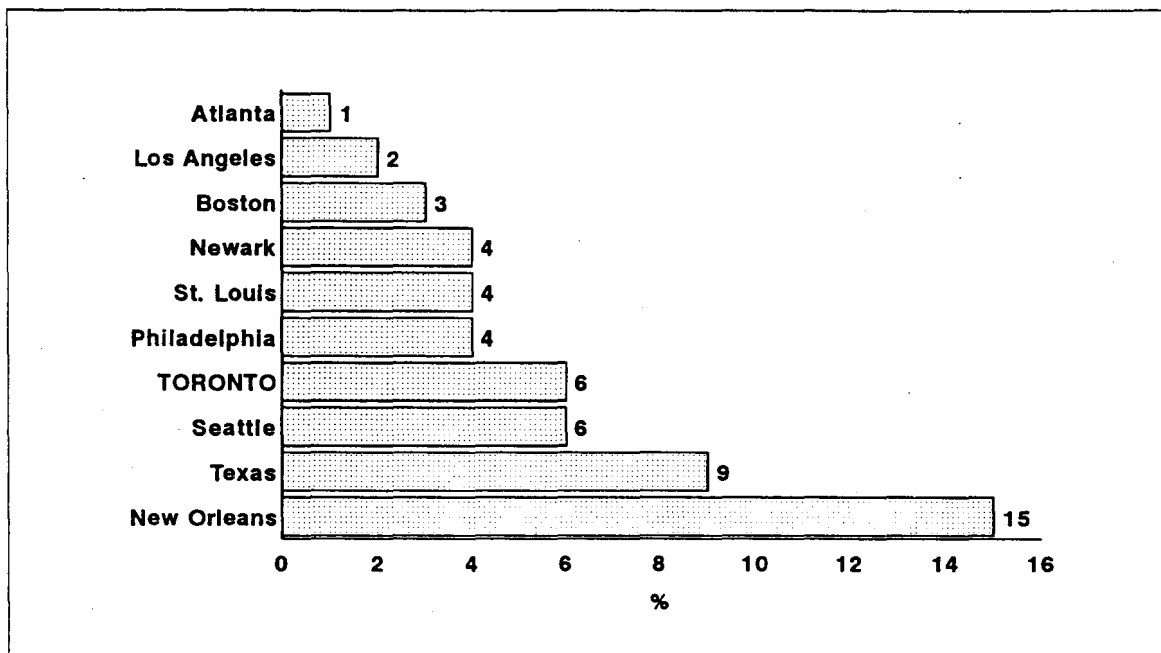
See Table 3

Figure 21 Cannabis as the Primary Drug Problem of ARF Treatment Clients



Percentages based on all cases including alcohol
See Tables 4 & 5

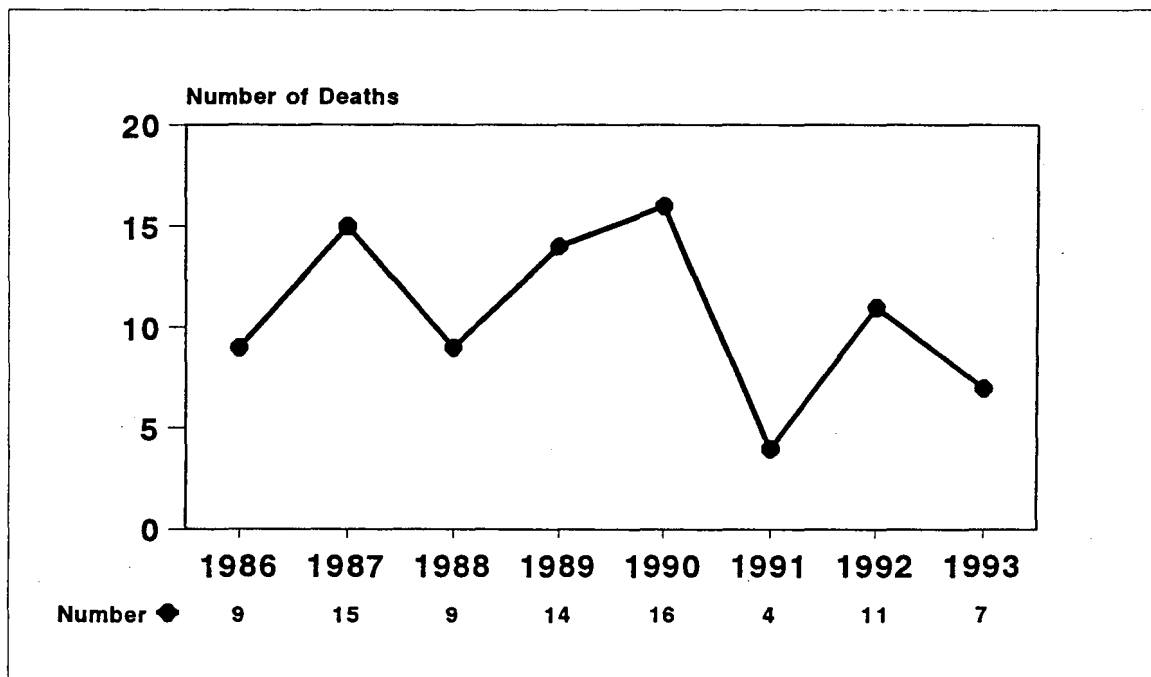
Figure 22
Percentage of Treatment Admissions for Primary Marijuana Abuse (1993)



Source: CEWG (1994)

Note: Percentages based on all cases including alcohol

Figure 23
Drug-Factor Deaths in Which Cannabis Was Detected



See Table 6

SEDATIVE-HYPNOTICS AND TRANQUILLIZERS

Survey Data

Table 1

Survey indicators show a substantial long-term decline in the use of tranquillizers especially among the mainstream adult population, whose use dropped from 14.6% in 1977 to 4.7% in 1994. Among secondary school students, use dropped from 4.0% in 1983 to 1.0% in 1993. Use of tranquillizers, however, is prevalent among Toronto street youth, with 29% reporting use in 1992.

Treatment Data

Tables 4, 5 Figure 24

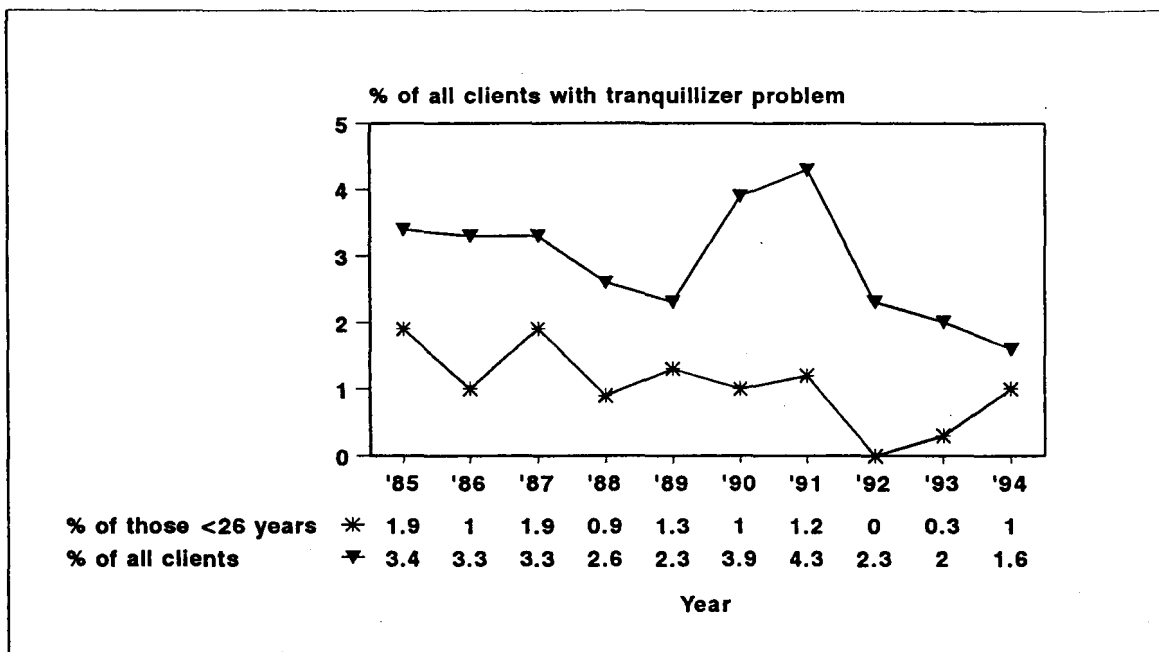
Relative to other substances, tranquillizers and sedative-hypnotics are not frequently cited as a major problem of abuse. Under 2% of clients cite these substances as problematic.

Drug-Related Deaths

Tables 6, 7 Figure 25

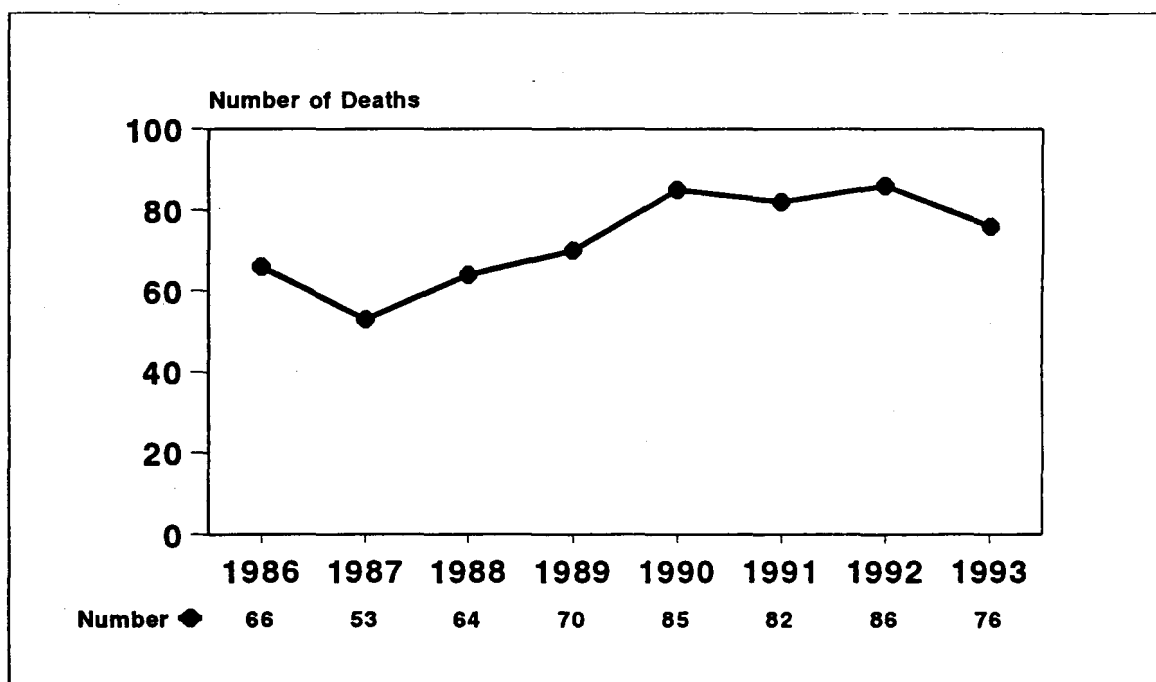
Next to alcohol, barbiturates, sedative/hypnotics and tranquillizers are the most frequently found substance in coroner cases: in 1993, 78 of the 161 drug-related deaths (4.0 per 100,000) had positive tests for these substances. This represents a 9% drop from the 86 recorded in 1992. In addition, the percentage of lethally-involved cases dropped from 61% in 1991 to 36% in 1993. About half (53%) of sedative-hypnotic deaths were classified as accidental, 35% as suicide, and 12% unknown. About two-thirds of cases (62%) involved males. The average age of death was 40 years.

Figure 24
Tranquillizers as the Primary Drug Problem of ARF Treatment Clients



Percentages based on all cases including alcohol
 See Tables 4 & 5

Figure 25
Drug-Factor Deaths in Which Sedative-Hypnotics Were Detected



See Table 6

Survey Data**Table 1**

Past year use of LSD among Toronto secondary school students was 3.2% in 1993, a rate significantly lower than the 7.6% found in 1983. However, provincially there has been an upswing in hallucinogen use among secondary school students: between 1991 and 1993, the use of LSD increased among males, from 5.9% to 8.1%, the use of PCP increased among 13th graders, from 0.3% to 1.3%, and the use of "Ecstasy" [MDMA] increased from 0.4% to 2.7%.

Past year use of LSD among university students is similar to secondary students (4.2%). In contrast, use of hallucinogens among Toronto street youth is endemic; in 1992, 81% of street youth used LSD in their lifetime and 59% had used during the past 12 months.

Seizure Data**Tables 2A, 3
Figures 26, 27**

Seizures of LSD during the first three quarters of 1994 do not show dramatic activity. The number of seizures varied between 6 and 15 and the number of seized micrograms per hit varied between 232 and 4344, levels which are within range of earlier years. Seizures of LSD currently represent less than 1% of all drug seizures. Purity of LSD seized in 1994 was not available.

Focus group discussions with drug enforcement officers revealed the following about LSD in Toronto:

"LSD is starting to get off the floor. It has to do with this 60's era again. LSD will be coming back again. Two weeks ago I was offered LSD and I haven't heard of LSD since I went to high school... Enforcementwise in the last six months, the only LSD that we've seen of any significance was in Southeastern Toronto during the Pink Floyd concert and it was Americans that came up that were doing the dealing and I'd be willing to bet that three-quarters wasn't LSD at all, they were just ripping everybody off... Ecstasy [MDMA] made a small boom a little while ago. I think some of the kids were a little afraid of it, but doing marijuana and LSD where it's a little more known it wasn't new and it's a little more comfortable."

Treatment Data

Tables 4, 5
Figure 28

Hallucinogens are not frequently cited as a major problem of abuse among clients seeking treatment; under 1% of all clients and 2% of clients less than 26 years cite hallucinogens as their primary problem of abuse.

Drug-Related
Deaths

Tables 6, 7

No hallucinogen deaths occurred during 1993. Indeed, such deaths are infrequent with only two occurring since 1986.

SOLVENTS

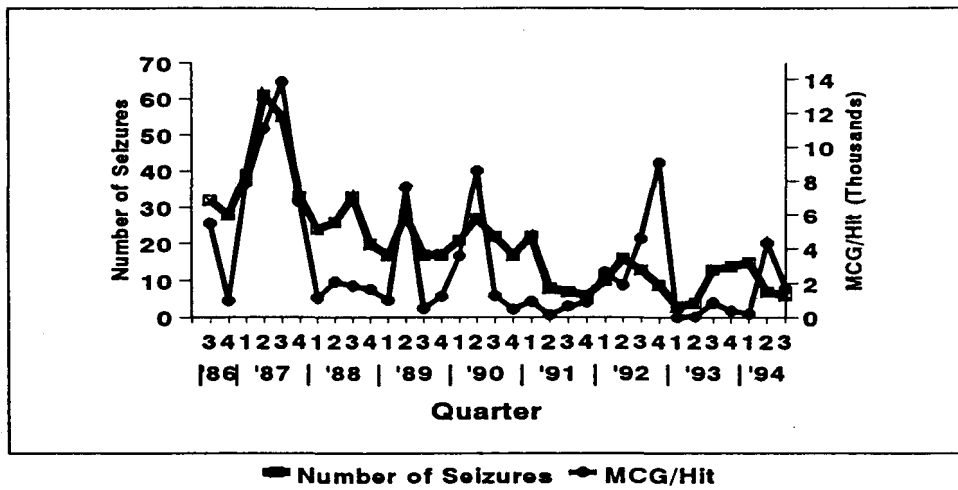
Survey Data (see pg. 2)

Survey indicators from 1993 show low rates of glue use (1.2%) and other solvent use (1.8%) among Metropolitan Toronto secondary students. Provincially, however, Grade 7 students use of glue is significantly higher (3.2%) than other grades (0.7% to 1.3%). Furthermore, the use of other solvents has increased from 1.6% in 1991 to 2.3% in 1993.

Drug-Related Deaths Tables 6, 7

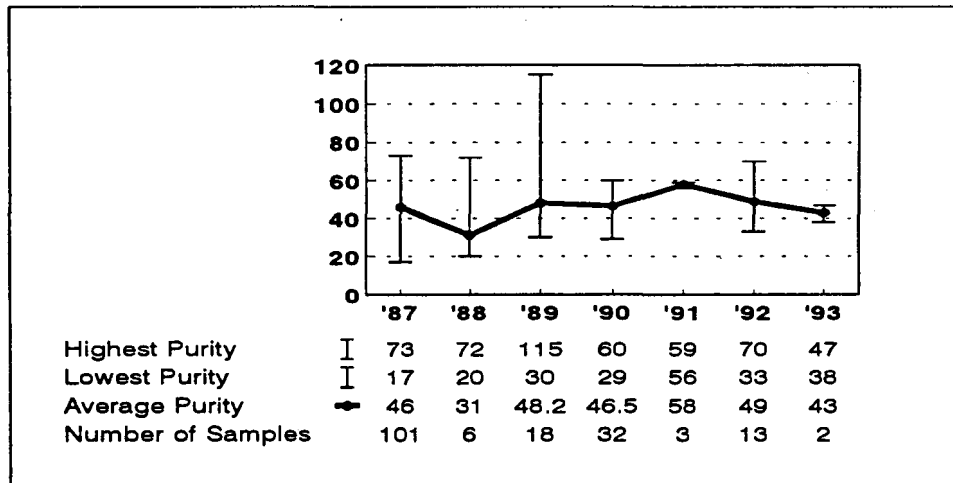
Nineteen individuals died with solvents or other poisons in their systems this exceeded the number of such deaths in 1991 and 1992, combined. Substances in this category were lethal alone in 58% of the cases observed and in lethal combination with other drugs 27% of the time. Thirty-two percent (6) of these deaths were accidental, 53% (10) were suicides, while the remaining 16% (3 deaths) were of undetermined origin. The average age of the deceased in this category was 43 years of age. Fourteen (74%) were males.

Figure 26
Seizures of LSD



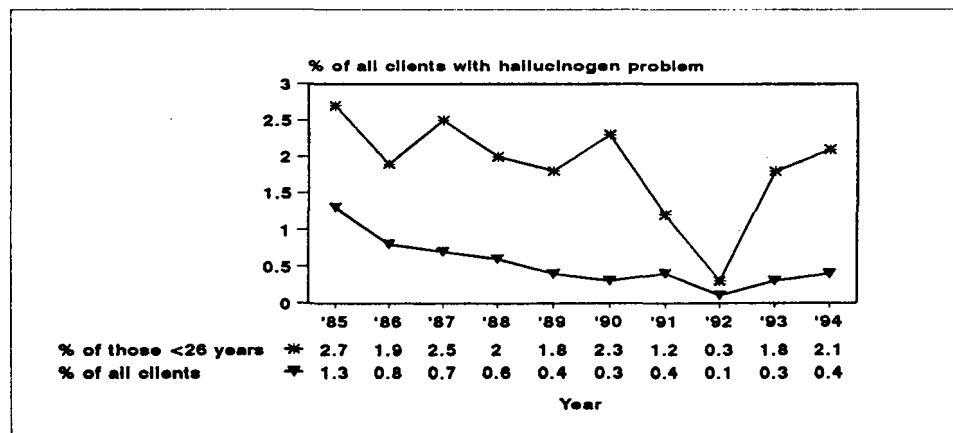
See Table 2A

Figure 27
Purity of Seized LSD (MCG/HIT)



See Table 3

Figure 28
Hallucinogens as the Primary Drug Problem of ARF Treatment Clients



Percentages based on all cases including alcohol
See Tables 4 & 5

STIMULANTS

Survey Data

Table 1

Past year use of methamphetamines ("speed") among secondary school students in 1993 was the lowest recorded since the 1970s (0.6%). Use was similarly low among university students (1.7%). In contrast, 24% and 9% of street youth reported methamphetamine use in 1991 and 1992, respectively.

Seizure Data (see pg. 3)

Seizures of methamphetamines have remained uncommon since 1986. Indeed, no seizures of methamphetamines occurred during the first three quarters of 1994.

Drug-Related Deaths (see pgs. 4, 5)

No stimulant deaths occurred in 1993. In fact, only four drug-factor deaths involved stimulants in the eight year period monitored.

The introduction and spread of the Human Immunodeficiency Virus (HIV) and resulting Acquired Immunodeficiency Syndrome (AIDS) during the past decade has added another component to the issue of drug use. HIV infection has risen at an alarming rate among injection drug users (IDUs) in many cities in North America and Europe. Studies of IDUs, confirm that both needle sharing and high risk sexual behaviours can be highly prevalent in this population, further increasing the risk of disease transmission both within and outside of the drug using community. One hundred cases of pediatric HIV have also been reported to Toronto health authorities. The risk breakdown for these cases is as follows: 44 infected through blood transfusions, 31 perinatal transmission, 3 were born in an endemic country, 3 attributed to sexual transmission, one infection through injection drug use, 7 listed other risk factors, and 11 for which no risk was identified.

**HIV
Surveillance
Data**

Under the Health Promotion and Protection Act of 1983, Ontario physicians must report all patients testing positive for HIV to local health authorities.

The statistics pertaining to HIV and AIDS in this report are based only upon data collected by the City of Toronto, Department of Public Health. It should be noted that the data currently available do not suggest any significant deviation in the pattern of risks among the Metro health units.

As of October 31, 1994, 7,018 reports of HIV infection and 2,414 cases of AIDS among adults were reported to the City of Toronto, Department of Public Health. By far the highest risk category among those with AIDS was homosexual or bisexual behaviour among males, reported by 91% (2,191) of these individuals. Among this latter group, 90 had used injection drugs. Injection drug use as a sole risk factor was reported by 49 people, or approximately 2% of all individuals diagnosed with AIDS.

**Needle
Exchange**

In response to growing concern regarding the spread of HIV, the IDU project was created by the Toronto Department of Public Health in 1989. More commonly known as The Works, this program provides harm reduction services including needle exchange and the distribution of bleach kits, condoms, and related educational materials.

As of June 30, 1994, The Works had recorded more than 64,000 client visits. A total of 607,365 used needles have been turned into The Works during its 5 years of operation. In addition, 9,800 kits for disinfecting needles have been distributed over this period. The relatively low percentage of AIDS cases attributable to injection drug use in the City of Toronto may be related to the success of the Needle Exchange Program.

Interestingly, the ARF survey of street youth found a decline in the percentage of those reporting lifetime injection drug use (from 41% in 1990 to 28% in 1992) as well as a decline in needle-sharing (from 11% to 4%).

The following table depicts the type and number of services provided and referrals made by staff of needle exchange programs under the auspices of the City of Toronto, Department of Public Health. Note that the numbers displayed represent referrals to services, which may or may not have been completed by the clients.

Referrals of Needle Exchange Clients to Additional Services - Six month period ending:											
	Dec 1989	June 1990	Dec 1990	June 1991	Dec 1991	June 1992	Dec 1992	June 1993	Dec 1993	June 1994	Totals
REFERRALS											
STD/HIV Testing	0	0	0	0	5	15	17	16	13	9	75
Detox	3	12	8	14	10	8	10	10	21	17	113
Housing	0	5	49	2	1	20	11	14	15	16	133
Counselling	0	14	17	11	1	24	13	19	12	21	132
Medical Care	4	13	19	86	46	26	30	26	32	31	313
Drug Treatment	5	10	49	69	54	33	19	26	26	40	331
Alternate Exchange	0	0	0	0	0	5	7	38	11	7	68
Other Agency	22	63	174	209	106	39	19	18	24	19	693
SERVICES											
Counselling	0	0	0	63	71	288	251	191	183	215	1,262
Support	0	0	0	132	204	445	371	408	444	345	2,349
Information	0	0	0	0	22	718	333	496	450	203	2,222
Hep B Shot	0	0	0	0	0	45	57	48	51	53	254
STD/HIV Test	0	0	0	0	0	7	6	9	17	6	45
Education	0	0	0	2,890	3,486	129	73	190	157	143	7,069
Medical Care	0	0	0	0	13	57	60	25	49	38	242
Drug Counselling/ Support	0	0	0	0	0	58	12	60	106	62	307

Source: The Works Report, January 9, 1995, Toronto Department of Public Health, Community Health Information Section.

Newborn Hospital Discharge Data

The records of infants born in Metropolitan Toronto hospitals between 1986 and 1993, provided by the Ontario Ministry of Health, were searched for evidence of prenatal drug exposure. Data collection was limited to those infants born to parents living in Metropolitan Toronto at the time of delivery. Specifically, infants whose discharge diagnoses included at least one of the following codes, conforming to the International Classification of Disease-9 (ICD-9) codes, were identified:

- ICD-9 Code 655.5 - Suspected damage to fetus from drugs (excludes fetal distress in labour and delivery due to drug administration or drug withdrawal syndrome);
- ICD-9 Code 760.7 - Noxious influences transmitted via placenta or breast milk (excludes anesthetic and analgesic drugs administered during labour and delivery); and
- ICD-9 Code 779.5 - Drug withdrawal syndrome in newborn of dependent mother.

The numbers of infants affected by maternal drug use has risen sharply over the period monitored. This rates observed surpass the trend in the birth rate for the relevant period. One caveat to be considered in studying these trends, however, is the extent to which increased physician awareness of the potential for prenatal drug damage affects the data. Moreover, one further limitation was imposed by the use of the 4-digit ICD-9 codes as opposed to the more specific 5-digit expansions. This latter coding system would have allowed separation of the noxious effects of antibiotics, potentially included in the 760.7 code. However, these data were not available.

Metropolitan Toronto Selected Newborn Diagnoses - Twelve-month period ending March:								
	1986	1987	1988	1989	1990	1991	1992	1993
Drug-induced damage	2	2	3	3	4	6	8	5
Noxious influences through placenta	5	7	8	12	32	35	46	59
Newborn drug withdrawal syndrome	4	7	11	16	23	26	23	23
Total Number of Newborns	11	16	22	31	59	67	77*	81

Source: Ontario Ministry of Health, User Support Branch

* An infant may appear in more than one category, with the resulting effect on the total.

Injecting Drug Use and Risk of HIV Infection Study - Toronto Centre

A group of researchers at the University of Toronto (led by Dr. Peggy Millson) has been studying injection drug users since 1991, as a part an international collaboration proposed by the World Health Organization. This investigation included a detailed interview with each subject, along with collection of both saliva and blood samples for HIV testing. The study included a sample of clients who were in drug treatment and a sample of clients who were not in treatment (some were clients of needle exchange programs). Selected results of this three-year study are presented on page.

The average age of injection drug users in the study was 31-32 years of age. There were no significant variations in age over the three year period. About 3.5% of those interviewed were under the age of 20.

The average age of first injection in the combined group of current injectors and those in treatment was 19.6 years of age, with no significant variations over time. The average user had been injecting for about 12 years.

There was an significant increase over the study period in the number of users citing heroin as their drug of choice, with fewer preferring cocaine. Although relatively few subjects reported crack as their drug of choice, this number did increase significantly over the three years.

The HIV seroprevalence rates are also displayed in the table. Over the three years, the rate rose from 4.5% to 7.6%. Although this change is not statistically significant, these results do suggest a slightly increased risk.

University of Toronto Injecting Drug Use Study						
Age	1991/92 (N = 479)		1992/93 (N = 489)		1993/94 (N = 499)	
Age of IDU's						
Average (years)	31.2 (± 7.5)		32.2 (± 8.2)		31.2 (± 8.0)	
Range (years)	17-67		16-62		16-56	
By group	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
< 20 yrs.	12	2.5	18	3.7	21	4.2
20-29 yrs.	202	42.2	179	36.6	191	38.3
30-39 yrs.	202	42.2	199	40.7	215	43.1
40+ yrs.	63	13.2	93	19.0	72	14.4
Age of First Injection (years)						
Average	19.8		19.6		19.4	
Range	9-49		9-61		10-48	
# of Yrs. Injecting Average	11.4		12.7		11.9	
Range	1-39		1-36		1-39	
Drug of Choice						
Cocaine	265	55.3	211	43.3	229	45.9
Heroin	175	36.5	217	44.6	213	42.7
Amphetamines	10	2.1	1	0.2	4	0.8
Cannabis	2	0.4	5	1.0	13	2.6
Other Opiates	9	6.6	14	2.9	5	1.0
Crack	6	1.3	17	3.5	24	4.8
Alcohol	4	0.8	9	1.8	5	1.0
HIV Testing						
# of Samples:	471	98.3	477	97.5	484	97
Positives	21	4.5	23	4.8	37	7.6
Negatives	450	95.5	454	95.2	447	92.4

DISCUSSION

The harm caused by drug use, like the harm caused by other social problems, requires the attention of individuals, communities, and the society-at-large. Yet, responses, if they are to be effective and efficient, require a knowledge base from which to build. Measuring the contours of the drug problem is neither simple nor straightforward. Indicators of drug use vary on several dimensions and each captures a slightly different component of the drug use problem. The extent and pattern of drug use and related problems can often change both quickly and dramatically in a city or community. The rapid escalation of cocaine and crack use in the 1980s is a recent example. Fortunately, these entries into the Metropolitan Toronto street scene did not reach the proportions they did in larger American urban centres.

A number of trends presented in this report will be followed with particular interest during the coming year. The first regards crack cocaine. Although the data would suggest that availability of crack cocaine has not increased dramatically during the past year, the percentage seeking treatment has. Indeed, among younger clients, cocaine surpasses alcohol as a major problem of abuse. Whether this increase is due to current or former drug users adopting a new drug to their repertoire, or whether it is due to a new population of crack users is unclear.

The second area requiring continued monitoring is heroin use. The current purity of street heroin remains high, along with the associated number of fatalities. Also, increases in narcotic problems among young clients may have a long-term effect on the future distribution of narcotic problems among the general treatment population.

Indicators of hallucinogenic use will also be watched closely over the coming years. Increased use of hallucinogens has been noted in several U.S. cities. Although Toronto survey indicators did not identify increases in hallucinogen use, two recent provincial surveys, one among secondary school students and one among university students have documented increases in the use of LSD.

Indications of increased use of various other drugs, including marijuana and solvents, will also be closely monitored.

The escalation in the number of diagnoses of drug-induced damage in newborns is also alarming. Along with continued monitoring of these data, further indicators of maternal drug use will be sought, possibly indicating more information as to the specific drugs being used.

As we noted earlier, this report intentionally focuses on illicit drug use. This does not mean that the societal and community fabric are unaffected by legal drugs. Quite the opposite, the harm caused by legal drugs such as alcohol and tobacco far exceed the harm caused by illegal ones. Indeed, the number of deaths attributable to both alcohol and tobacco are many times larger than those noted in this report. However, the knowledge base and official sources of data for monitoring legal drugs is more developed, refined and available than is the case for illegal drugs. Our goal is to develop parallel monitoring systems for illicit drug use that can be used to better understand changes in drug use, enabling communities to be better prepared to deal with them.

TABLES

Table 1 Prevalence of Drug Use (Past 12 Months) Among Toronto Students ^a , University Students, Adults ^b and Street Youth ^c (1968-1994)																			
Drug	Population	'68	'70	'72	'74	'77	'79	'81	'82	'83	'84	'85	'87	'89	'90	'91	'92	'93	'94
Cannabis	Students	7	18	21	23	20	25	19	-	21	-	21	13	13	-	10	-	9	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
	Adults	-	-	-	-	9	-	-	13	-	17	-	13	12	-	12	-	-	10
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83	-	-
Cocaine	Students	-	-	-	-	1	1	4	-	3	-	6	4	3	-	2	-	1	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
	Adults	-	-	-	-	-	-	-	-	-	3	-	3	2	-	2	-	-	<1
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	64	-	-	-	-
Crack	Students	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	1	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Adults	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	<1	-	-	<1
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	31	-	-
Heroin	Students	-	-	-	-	-	-	1	-	1	-	2	2	1	-	2	-	2	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Adults	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	4	-	-

Table 1 Prevalence of Drug Use (Past 12 Months) Among Toronto Students ^a , University Students, Adults ^b and Street Youth ^c (1968-1994)																			
Drug	Population	'68	'70	'72	'74	'77	'79	'81	'82	'83	'84	'85	'87	'89	'90	'91	'92	'93	'94
LSD	Students	3	7	7	6	5	6	6	-	8	-	7	3	5	-	4	-	3	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	70	-	59	-	-
Tranquillizers	Students	-	-	-	-	-	-	4	-	4	-	4	2	2	-	1	-	1	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Adults	-	-	-	-	15	-	-	9	-	8	-	3	6	-	6	-	-	5
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stimulants	Adults	-	-	-	-	2	-	-	5	-	5	-	2	3	-	1	-	-	3
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
Speed	Students	-	5	3	4	2	3	2	-	2	-	4	3	3	-	1	-	<1	-
	University Students	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	Street Youth	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	9	-	-

Sources: ^a Based on strata subsample of a provincial survey (Alcohol and Other Drug Use Among Ontario Adults in 1994 and Changes Since 1977 by E.M. Adlaf, F. Ivis, & R.G. Smart). Addiction Research Foundation. ^b 1968-1974 estimates refer to use during the prior 6 months; 1977-1991 estimates refer to use during the prior 12 months. Estimates based on strata subsample from a provincial survey (The Ontario Student Drug Use Survey: 1977-1993, by E.M. Adlaf, R.G. Smart, & G.W. Walsh, Addiction Research Foundation). ^c Drifting & Doing: Changes in Drug Use Among Toronto Street Youth, 1990-1992, by R.G. Smart, E.M. Adlaf, G.W. Walsh & Y.M. Zdanowicz. Addiction Research Foundation: Toronto.

Note: Percentages are rounded.

Table 2A
Number of Seizures and Total Quantity Seized (in grams)

Year	Quarter	Cocaine		Crack		Heroin		LSD	
		Number of Seizures	Total Quantity	Number of Seizures	Total Quantity	Number of Seizures	Total Quantity	Number of Seizures	Total Quantity*
1986	3	191	3,090	NA	NA	28	47	32	5,481
	4	267	4,600	NA	NA	21	64	28	974
1987	1	331	6,114	NA	NA	41	98	39	7,825
	2	338	9,855	NA	NA	28	321	61	11,074
	3	255	2,020	NA	NA	54	586	55	13,852
	4	413	7,795	NA	NA	35	1,514	33	6,725
1988	1	501	6,944	NA	NA	36	187	24	1,145
	2	454	6,834	NA	NA	35	148	26	2,083
	3	612	12,030	NA	NA	51	377	33	1,856
	4	700	8,464	NA	NA	40	1,570	20	1,643
1989	1	824	11,051	NA	NA	71	353	17	1,005
	2	663	23,375	225	226	103	2,538	28	7,641
	3	550	21,966	635	639	53	2,289	17	528
	4	495	16,165	376	342	63	1,431	17	1,238
1990	1	559	56,635	475	444	94	1,557	21	3,587
	2	433	26,906	533	434	88	1,180	27	8,604
	3	365	11,418	573	598	97	2,439	22	1,277
	4	307	4,609	573	566	52	617	17	487
1991	1	471	10,976	644	580	65	89	22	943
	2	401	19,000	668	890	48	64	8	157
	3	322	5,176	638	834	60	145	7	654
	4	271	47,355	707	1,170	49	2,507	6	884
1992	1	276	98,072	863	1,561	47	858	10	2,646
	2	189	2,348	666	1,620	96	750	16	1,893
	3	164	10,683	727	1,348	101	736	13	4,630
	4	145	4,181	697	1,085	133	1,279	9	9,095
1993	1	141	4,719	702	1,485	128	846	3	27
	2	146	1,299	626	2,179	140	1,501	4	59
	3	123	3,154	592	2,547	148	374	13	868
	4	116	4,169	653	1,554	129	2,297	14	397
1994	1	69	2,056	657	3,205	104	960	15	232
	2	101	15,761	655	1,457	128	2,070	7	4,344
	3	120	13,654	591	1,743	149	4,599	6	1,714

Source: Metropolitan Toronto Police Force

* Measured in micrograms per hit

Table 2B
Number of Seizures and Total Quantity Seized (in grams)

Year	Quarter	Marijuana		Hash Oil		Hashish	
		Number of Seizures	Total Quantity	Number of Seizures	Total Quantity	Number of Seizures	Total Quantity
1986	3	370	19,538	31	49	389	13,540
	4	370	13,846	16	30	384	25,360
1987	1	615	23,475	34	135	194	4,725
	2	857	20,967	40	533	90	3,451
	3	432	67,275	26	161	333	3,364
	4	729	16,070	29	21,886	298	8,925
1988	1	399	18,204	27	3,846	279	7,644
	2	479	18,714	35	589	206	2,003
	3	434	45,082	29	5,801	359	4,838
	4	369	41,238	23	155	285	27,096
1989	1	520	11,916	47	547	84	3,114
	2	624	52,472	45	539	219	25,666
	3	272	70,078	22	145	604	9,632
	4	213	21,739	12	40	402	12,017
1990	1	327	23,244	16	325	470	32,584
	2	259	9,089	6	18	499	53,098
	3	217	12,338	13	619	409	11,475
	4	192	31,376	8	123	339	20,024
1991	1	348	30,118	9	8,402	201	3,329
	2	314	7,542	12	246	85	1,628
	3	289	22,387	4	5	195	6,617
	4	329	80,235	6	118	157	14,760
1992	1	371	75,345	10	605	76	6,763
	2	382	16,628	10	220	59	2,380
	3	435	58,637	10	273	101	23,926
	4	355	80,091	9	176	116	10,397
1993	1	373	86,730	7	337	120	17,080
	2	355	138,185	13	2,204	125	36,442
	3	365	105,439	9	1,721	90	5,254
	4	355	52,598	8	885	123	7,112
1994	1	293	35,938	8	515	121	5,861
	2	342	60,796	10	7,253	156	4,071
	3	415	292,730	8	4,620	108	2,495

Source: Metropolitan Toronto Police Force

Table 3
Trends in Purity of Seized Substances

	Year	Average	High	Low	No. Samples
Marijuana	1987	2.5	6.2	.001	54
	1988	1.1	4.9	.06	22
	1989	2.4	12.0	.06	37
	1990	3.5	23.7	.04	59
	1991	3.1	12.0	.005	119
	1992	3.5	18.0	.004	113
	1993	4.2	11.0	.30	98
	1994	3.4	12.0	.04	81
Hashish	1987	6.1	20.0	.8	15
	1988	5.3	7.4	4.1	11
	1989	6.1	9.8	2.3	26
	1990	9.5	24.0	.1	37
	1991	8.8	35.0	.05	44
	1992	7.6	20.0	.07	31
	1993	7.2	38.0	0.1	27
Hash Oil	1987	16.4	33.0	.09	35
	1888	10.0	19.0	1.6	34
	1989	20.7	32.0	.05	11
	1990	11.5	17.8	2.5	6
	1991	0.0	0.0	0.0	0
	1992	12.7	28.0	.0002	16
	1993	1.3	1.8	.60	3
Cocaine HCl	1987	69.1	100	.001	1618
	1988	77.3	100	.01	1666
	1989	78.7	100	.003	1673
	1990	68.0	100	.03	1147
	1991	67.9	100	.003	1338
	1992	66.5	100	.002	1195
	1993	65.3	99	0.2	697
	1994	69.1	97	5	430

Table 3
Trends in Purity of Seized Substances

	Year	Average	High	Low	No. Samples
Crack	1987	87.4	100	1.4	85
	1988	88.9	100	35.0	90
	1989	92.3	100	25.0	64
	1990	90.9	100	50.0	53
	1991	89.1	98	34.0	135
	1992	87.7	100	58.0	142
	1993	85.0	100	13.0	144
	1994	83.9	97	24	139
LSD	1987	46.0	73.0	17.0	101
	1988	31.0	72.0	20.0	6
	1989	48.2	115.0	30.0	18
	1990	46.5	60.0	29.0	32
	1991	58.0	59.0	56.0	3
	1992	49.0	70.0	33.0	13
	1993	43.0	38.0	47.0	2
Heroin HCl	1987	38.5	94.0	4.0	187
	1988	56.7	99.0	4.0	172
	1989	53.2	100.0	9.0	135
	1990	57.9	100.0	8.0	250
	1991	58.9	100.0	5.0	307
	1992	57.9	100.0	2.0	438
	1993	72.0	100.0	3.5	325
	1994	68.1	98.0	17.0	216

Source: Metropolitan Toronto Police Force

Table 4 Percentage of Patients Presenting for Treatment by Major Problem of Abuse											
Year	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94*
Alcohol	62.0	63.9	59.5	60.0	55.4	53.2	49.4	54.8	59.2	59.5	51.4
Cannabis	10.2	10.3	11.9	9.0	8.2	5.2	6.6	5.5	5.4	6.5	6.2
Cocaine	5.7	6.9	11.2	14.9	21.2	20.8	16.1	17.8	18.4	19.8	26.2
Narcotic	10.8	9.0	8.5	7.3	8.0	9.7	13.6	13.2	10.6	6.2	9.9
Tranquillizers	4.2	3.4	3.3	3.3	2.6	2.3	3.9	4.3	2.3	2.0	1.6
Hallucinogens	1.5	1.3	0.8	0.7	0.6	0.4	0.3	0.4	0.1	0.3	0.4
Solvents	1.3	0.8	0.9	1.1	0.9	0.8	0.5	0.2	0.4	0.2	0.3
Sedative/ Hypnotics	1.5	1.5	0.8	0.4	0.5	0.2	0.2	0.2	0.1	0.0	0.0
Other	2.7	2.8	3.2	3.4	2.6	7.4	8.1	3.6	3.6	5.4	4.0
Total Number	3,209	3,699	3,639	4,095	4,009	4,001	3,979	3,704	1,941	2,245	2,511

Source: Clinical Institute, Addiction Research Foundation.

* 1994 based on 9 month period (January-September, 1994)

Table 5
Percentage of Young Patients (aged under 26 years) Assessed for Treatment by Major Problem of Abuse

Year	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94*
Alcohol	36.9	35.3	25.3	20.6	21.7	28.2	34.7	43.5	37.3	28.3
Cannabis	35.3	37.5	35.3	33.7	23.0	30.5	21.8	12.5	17.3	17.3
Cocaine	13.9	17.8	28.8	38.0	47.5	34.6	35.6	31.0	31.9	35.2
Narcotic	1.4	1.0	0.6	0.9	1.6	0.7	2.5	11.3	9.0	14.7
Tranquillizers	1.9	1.0	1.9	0.9	1.3	1.0	1.2	0.0	0.3	1.0
Hallucinogens	2.7	1.9	2.5	2.0	1.8	2.3	1.2	0.3	1.8	2.1
Solvents	1.5	1.7	2.5	2.7	2.6	2.0	1.2	0.0	0.9	0.2
Sedative/Hypnotics	1.4	0.5	0.6	0.5	0.3	0.2	0.0	0.0	0.0	0.0
Other	5.0	3.1	2.5	0.7	0.3	0.7	1.8	1.5	1.5	1.2
Total Number	518	573	314	442	383	298	326	329	335	421

Source: Youth Clinic, Clinical Institute, Addiction Research Foundation.

* 1994 based on 9 month period (January-September, 1994)

Table 6
Number of Drug-Related Deaths in Which the Following Substances Were Detected

Year	1986	1987	1988	1989	1990	1991	1992	1993
Cannabis	9	15	9	14	16	4	11	7
Cocaine	12	22	27	38	25	25	39	32
Heroin	12	26	17	28	40	35	60	63
Sedative/Hypnotics & Tranquillizers	66	53	64	70	85	82	86	78
Solvents	NA	NA	NA	NA	NA	11	7	19

Table 7
Number of Drug-Related Deaths by Drug Lethality and Cause, 1990 - 1993

Year		Cocaine		Heroin		Cannabis		Sedative-Hypnotics		Solvents	
		N	%	N	%	N	%	N	%	N	%
1990	Number of Positive Tests	25	16	40	25	16	10	85	54	NA	NA
	<i>Drug Lethality</i>										
	Sole Lethal Cause	5	20	27	68	0	0	9	11	NA	NA
	Lethal Combination	3	12	9	22	1	6	25	29	NA	NA
	Non-lethal Level	17	68	4	10	15	94	51	60	NA	NA
	<i>Type of Death</i>										
	Accidental	22	88	34	85	12	75	42	49	NA	NA
	Suicide	2	8	6	15	3	19	41	48	NA	NA
Unknown	1	4	0	0	1	6	2	2	NA	NA	
1991	Number of Positive Tests	25		35		4		82		11	
	<i>Drug Lethality</i>										
	Sole Lethal Cause	5	20	16	46	0	0	6	7	8	73
	Lethal Combination	6	24	17	48	1	25	44	54	1	9
	Non-lethal Level	14	56	2	6	3	75	32	39	2	18
	<i>Type of Death</i>										
	Accidental	20	80	28	80	3	75	32	39	4	36
	Suicide	5	20	5	14	1	25	43	52	5	45
Unknown	0	0	2	6	0	0	7	9	2	19	

Table 7
Number of Drug-Related Deaths by Drug Lethality and Cause, 1990 - 1993

		Cocaine		Heroin		Cannabis		Sedative-Hypnotics		Solvents	
1992	Number of Positive Tests	39		60		11		86		7	
	<i>Drug Lethality</i>										
	Sole Lethal Cause	11	28	26	43	0	0	6	7	4	57
	Lethal Combination	9	23	32	53	2	18	36	42	2	29
	Non-lethal Level	19	49	2	3	9	82	44	51	1	14
	<i>Type of Death</i>										
	Accidental	34	87	48	80	9	82	53	62	4	57
	Suicide	3	8	6	10	10	18	28	33	3	43
	Unknown	2	5	6	10	0	0	5	5	0	0
1993	Number of Positive Tests	32		63		7		78		19	
	<i>Drug Lethality</i>										
	Sole Lethal Cause	3	9	36	57	0	0	6	8	11	58
	Lethal Combination	3	9	24	38	0	0	22	28	5	26
	Non-lethal Level	26	81	3	5	7	100	50	64	3	16
	<i>Type of Death</i>										
	Accidental	26	81	49	78	7	100	43	55	6	32
	Suicide	3	9	9	14	0	0	26	33	10	53
	Unknown	3	9	5	8	0	0	9	12	3	16

Source: Metro Toronto Coroner's Office

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