

REPORT OF THE MEDICAL HEALTH OFFICER

Investigation of an HIV Cluster Among Injection Drug Users (IDUs) in Saskatoon, Saskatchewan

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Prepared by Public Health Services**



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Executive Summary

HIV has been an ongoing public health concern in much of Canada and in the province of Saskatchewan since the early 1980s. In the last two years, the Saskatoon Health Region (SHR) has, similar to the province of Saskatchewan in general, witnessed higher-than-normal reports of new cases of HIV. In 2005, it became apparent that an extensive network of intravenous drug users and their sexual partners were rapidly accounting for the majority of new cases being reported to Public Health.

This report summarizes the provincial epidemiology of HIV from the existing data, provides a snapshot of the last 2 years of HIV cases in SHR, and describes an HIV outbreak investigation conducted in Saskatoon. When considered together, we believe this provides a broad picture of the factors influencing this increase in newly reported HIV cases in Saskatchewan.

It is important to exercise caution when interpreting HIV surveillance data (as is the case in other parts of Canada). Surveillance data is subject to delays in reporting, under reporting, and changes in HIV testing behaviours (e.g., clients who come forward versus those actively sought out for testing). Surveillance data will only tell us about who has been tested and diagnosed with HIV or AIDS and does not tell us about those who remain untested and undiagnosed. As HIV today is a chronic infection with a long latent period, many individuals infected in a given year may not be diagnosed until many years later¹.

Preventing new HIV infections in drug-using populations depends on reaching large numbers of the risk-target population and rapidly making core interventions available and accessible to them. This is referred to as "scaling-up" of interventions which, in this context, refers to increasing the intensity of public health (community-based) interventions to a level where HIV infection can be controlled among injecting drug users within a reasonable period of time. Preventing drug use is an overall and longer-range goal for Public Health. Mitigating some of the serious consequences of injection drugs use and HIV infection will require the integration of HIV/AIDS programs with other existing health and social programs. Appropriate program integration is essential for many of the complex health needs of those involved in using injection drugs.

This report emphasizes the need to broaden HIV/AIDS awareness in the community, and the promotion of preventive health and evidence-based treatment interventions in this community. An alternative approach to HIV case finding, testing and referral has, in this instance, possibly offered a more efficient strategy to reaching people who are often difficult to reach. Broadly speaking, the recommendations in this report speak to stronger prevention programs and more universal preventive health education. When undertaken, HIV testing

¹ HIV and AIDS in Canada, Surveillance Report to June 30, 2005, Public Health Agency of Canada (PHAC), November 2005

must be closely linked to referral for care and other treatment services. In a high-needs community, treatment and care must be coordinated and, where possible, integrated. To this end, the report outlines the following elements upon which to build specific recommendations:

- Comprehensive surveillance
- Harm-reduction strategies
- Testing and continuing care
- Primary prevention and health education
- Community outreach
- Other supports

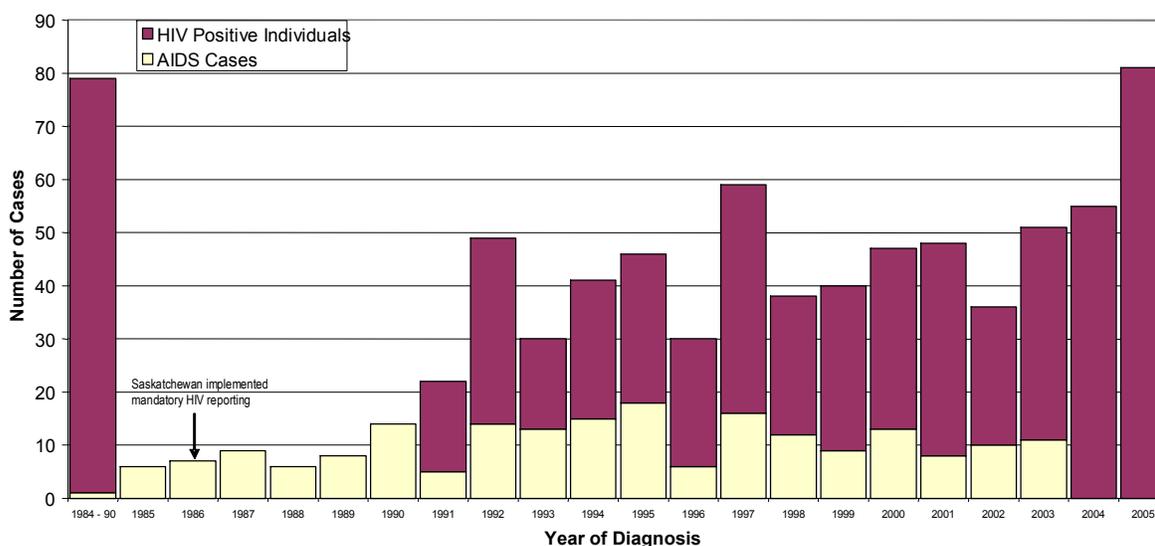
HIV in Saskatchewan 1994 to 2005

There has been a continuing upward trend in new cases of HIV reported in the province of Saskatchewan. Annually, the total number of newly diagnosed HIV cases in the province has fluctuated between 26 and 43 in the period 1994 to 2003. In 2004, the annual total increased to 55, compared to 40 in 2003, and 26 in 2002. By the end of December 2005, there were 81 new cases where reported in the province. It should be noted that, although HIV cases are newly diagnosed and reported to Public Health in a given year, they may have been HIV positive for several years prior to testing. Also, people may engage in high-risk behaviour for months or years prior to becoming infected with HIV. These are important factors to acknowledge when reviewing the data and planning for prevention. Increased cases may mean more intensive case finding and contact tracing, or it may be due to increased incidence of new HIV cases, factors which may not always be easily disentangled in every case. In 2005 and 2006, several regional health authorities (RHAs) have been actively conducting HIV contact tracing and follow up in light of the discovery of an extensive network of needle-sharing partners, initially uncovered in the Saskatoon Health Region. Over time, this cluster has demonstrated several connections other RHAs in the province.

Accurately measuring the incidence of new HIV infections can help us understand how HIV is spreading now and how to more effectively focus our preventative efforts. However, due to the chronic nature of HIV, this level of surveillance requires a huge sustained effort. In addition, Health Canada estimates that approximately 15% of HIV-positive Canadians do not know their HIV status, an issue that further complicates comprehensive HIV and AIDS surveillance².

Figure 1 illustrates the increasing number of new HIV cases diagnosed in the province since the early 1980s.

Figure 1: Reported Cases of HIV and AIDS, Saskatchewan 1986 - 2003



² HIV and AIDS in Canada, Surveillance Report to June 30, 2005, Public Health Agency of Canada (PHAC), November 2005

In 2005, Saskatchewan Health, in conjunction with the Canadian Field Epidemiology Program (CFEP)³, Public Health Agency of Canada (PHAC), and Regional Health Authorities (RHAs) in Saskatchewan, initiated a new investigation of HIV cases in the province. Saskatchewan Health has conducted several HIV investigative surveys and HIV seroprevalence studies in the past. These include the Prince Albert seroprevalence study (PASS) (1998) and the Regina seroprevalence study (RSS) (2000).

In May 2005, Saskatchewan Health called for an EPIAID⁴, to conduct a provincial HIV epidemiology review to identify the distribution of new cases and develop a profile of the risk factors that may have impacted the epidemiology of these new cases. Based on the descriptive epidemiology of these HIV cases, a more detailed and targeted investigation has been conducted to explore the link between the previously identified factors and the increasing number of HIV-positive cases reported in some RHAs.

This report summarizes the provincial epidemiology of HIV from the existing provincial data, and describes an HIV outbreak investigation conducted in the Saskatoon Health Region (SHR). Taken together, we believe this may provide a fuller picture of what factors may be influencing this increase in newly reported HIV cases in Saskatchewan.

The report concludes with recommendations for improved surveillance, enhanced harm-reduction strategies, improved access to testing, treatment and continuing care, and preventive strategies based on harm reduction and behaviour change philosophies. A comprehensive, sustained effort is needed to address the rising trend of HIV cases.

³ Deployed field epidemiologists

⁴ EPIAID - Epidemic Outbreak Investigation conducted by a CFEP Field Epidemiologist

Surveillance of AIDS and New HIV Infections

In 1986, Saskatchewan implemented mandatory reporting of all newly positive HIV results. Physicians and laboratories are required to report all newly positive HIV test results to the locally designated Medical Health Officer, providing the names and contact information for all of the new case's sexual and needle-sharing partners (Saskatchewan Public Health Act, 1996). As illustrated in the table below, 465 HIV infections, 203 AIDS cases and 139 AIDS deaths were reported in the province up to December 31, 2003.

Table 1: HIV Infections, AIDS Cases and Deaths in Saskatchewan Reported through December 31, 2003

HIV Infections, AIDS cases & deaths	Total #
HIV infections	465
AIDS ⁵ cases	203
Deaths	139

Since 1990, HIV-positive results have ranged from 17 to 43 individuals annually. This translates to a provincial HIV rate of 2 - 4 per 100,000 based on a relatively stable population of approximately 1 million residents since the early 1980s.

The provincial total of new HIV-positive reports rose from 40 cases in 2003, to 54 cases in 2004. In 2005, several RHAs reported a higher frequency of new HIV infections. There are several indicators that suggest this rise in new cases may continue as more Health Regions actively seek new cases in 2006.

⁵ The late diagnosis of HIV infection at the stage of AIDS, which is a complication that usually takes years to develop, is a failure of the medical, diagnostic and public health systems to facilitate early disease detection. It has been our experience, at the RHA level, that individuals are still being first diagnosed with HIV very late into the disease.

Factors Related to Rising HIV Rates

HIV Testing Trend

To date, evidence shows there has been a general increase in HIV testing volumes in Saskatchewan over the years; however, the prevalence of positive tests, although increasing, has remained very low (less than 1%), suggesting a need for more efficient targeting strategies and perhaps reaching individuals not being reached by current approaches to testing.

Table 2: HIV Infections⁶ and Testing Numbers in Saskatchewan Reported Through December 31, 2005

Year	Number of Individuals Tested	HIV Positive Individuals	% Positive Specimens
1991	6,440	17	0.26%
1992	12,152	35	0.29%
1993	13,390	17	0.13%
1994	17,814	26	0.15%
1995	16,100	28	0.17%
1996	17,883	24	0.13%
1997	29,664	43	0.14%
1998	22,015	26	0.12%
1999	20,827	31	0.15%
2000	21,954	34	0.15%
2001	25,067	40	0.16%
2002	26,341	26	0.10%
2003	30,137	40	0.13%
2004	36,778	54	0.15%
2005	39,299	81	0.21%
TOTAL	245,183	520	0.21%

As illustrated in Table 2, the annual number of specimens tested has risen steadily, from 6,640 in 1991 to 32,299 in 2005. Reasons for increased testing include immigration applications, organ transplant screening, “opt-out” prenatal testing, as well as a growing awareness and accessibility of testing facilities.

Location

HIV infection in Saskatchewan has been mainly a large-urban-centre phenomenon, comprising Regina, Saskatoon and Prince Albert, over the years. In 2004, Regina and Prince Alberta experienced significant increases in the number of newly diagnosed cases. Notably,

⁶ Adjustments have been made to eliminate repeat positive test results.

there were four cases reported in Cypress Hills Health Region in 2004. Anecdotal reports make some association with labour migration to the southern oil fields and high-risk sexual behaviour.

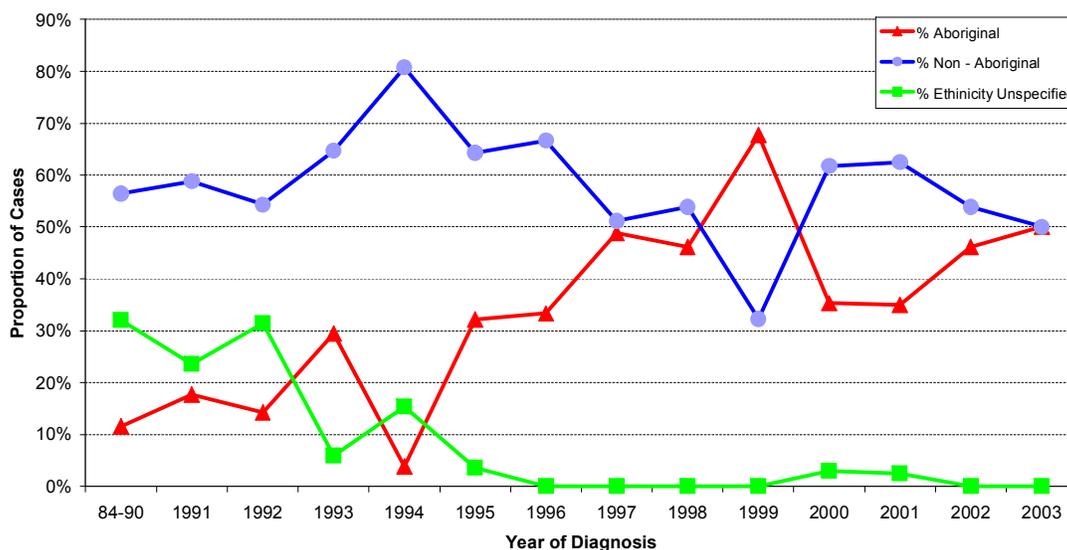
Age and Sex Distribution

Over the years, in Saskatchewan, as in the rest of North America, more men than women have been diagnosed with disease. This is from the early days of AIDS where acquired immune deficiency syndrome (AIDS) was mainly seen only in previously healthy young men. In Saskatchewan, a disconcerting trend of new disease is being diagnosed in younger individuals and in more women than men. This trend in increasing feminization of the HIV epidemic, and the further involvement of even younger age groups, has been observed all across Canada⁷.

Ethnicity

Figure 2 shows that in the mid-1980s, approximately 10% of new HIV infections were of aboriginal ancestry, as compared to 2003 figures where half of the 40 newly diagnosed HIV cases were aboriginal. In addition, some of the cases (13) reported with unknown ethnicity⁸ may be aboriginal. Forty percent (40.3%) of all newly diagnosed HIV infections, from 1993 to 2003 inclusive, were among individuals who self-identified as aboriginal.

Figure 2. Ethnic Distribution of New HIV Cases in Saskatchewan, 1984 – 2003



Exposure Factors

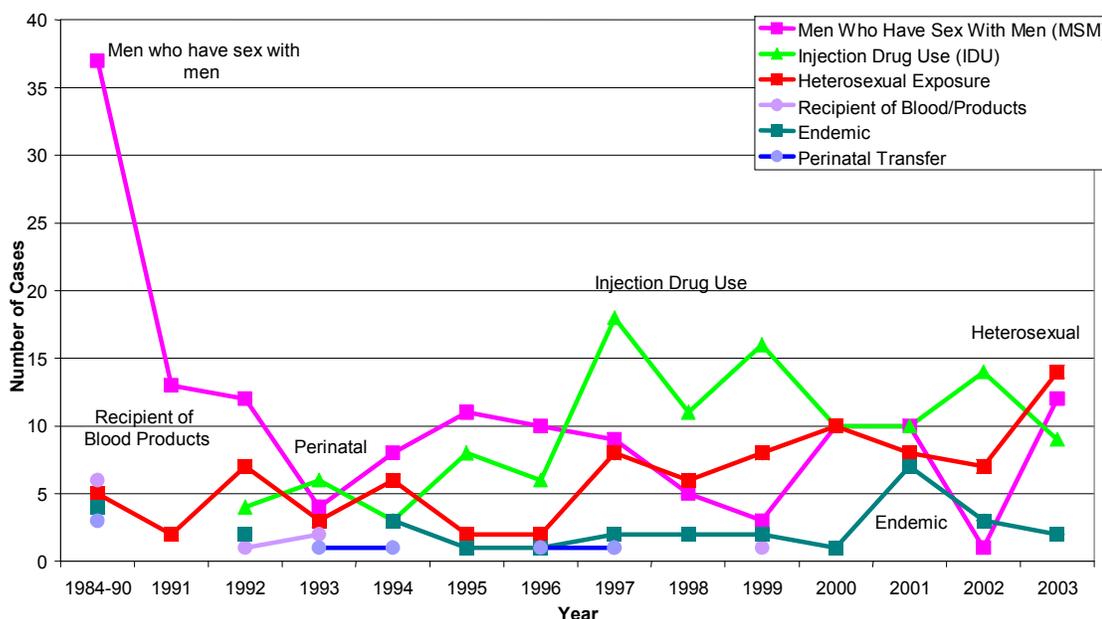
Accurately defining the risk-exposure category associated with each new HIV infection is crucial for prevention programming. As in other North American regions, the HIV epidemic was also first noticed within the “gay” male community in Saskatchewan. In recent years, the increasing incidence of new HIV infections has been closely associated with the use of injection drugs and heterosexual intercourse. Among men who have sex with men, we

⁷ HIV and AIDS in Canada, Surveillance Report to June 30, 2005, Public Health Agency of Canada (PHAC), November 2005

⁸ HIV testing and reporting is also done by other physician providers outside of Public Health

continue to receive reports of more sexual risk taking, particularly associated with recreational drug use, the use of the Internet as an avenue for seeking new anonymous sexual partners,⁹ and the resurgence of the bathhouse as a place to seek and find new sexual partners. From the data shown in Figure 3, it seems that the top three leading risk behaviours in Saskatchewan are: injection drug use, unprotected heterosexual intercourse, and men who have sex with men. New HIV cases, as a result of perinatal transfer and receiving blood products, have virtually disappeared from Health Regions, while new HIV cases from endemic countries remains at a low, stable rate.

Figure 3. Risk Exposure Categories and New HIV Cases in Saskatchewan, 1984 - 2003



Substantial proportions (21.8%) of 2004 cases were missing risk-factor information at the time of this update; however, the largest risk-factor group in 2004 was comprised of those who reported injection drug use (40.0%). There has been an upward trend in newly diagnosed HIV cases among individuals who self-identify as having aboriginal ancestry and use injection drugs. In 2004, 23 cases reported injection drug use (IDU) as a risk, which is more than double the 9 cases reported in 2003.

Increasing proportions (10.9%) of newly reported HIV cases in 2004 were attributed to sexual contact with a member of the opposite sex. From a prevention stand point this changing epidemiology of HIV is a major concern. Men who have sex with men (MSM) and MSM/IDU comprised 7.3% of cases in 2004.

⁹ STI case investigation reports Saskatoon Health Region (Not published)

Chlamydia & Gonorrhoea Infection

After years of decline, there has been an increase in the reported cases of Chlamydia and gonorrhoea in Canada¹⁰. Nationally, Chlamydia incidence increased by 60% from 1997 to 2003 and gonorrhoea incidence increased by 50% from 1997 to 2002¹¹. In 2000, Saskatchewan became the province with the highest incidence of Chlamydia per 100,000 population¹⁰. In 2002, Saskatchewan also became the province with the highest incidence of gonorrhoea per 100,000 population¹¹. The largest city in Saskatchewan, Saskatoon, is responsible for the greatest proportion of cases of Chlamydia and gonorrhoea in the province, perhaps due to greater population size and a higher prevalence of disease, an issue currently under investigation.

Figure 4 and Table 3 show that the rate of Chlamydia in Saskatchewan is more than double the national average in 2003.

Figure 4. Provincial and National Rates of New Chlamydia Infections, 1992 – 2003*

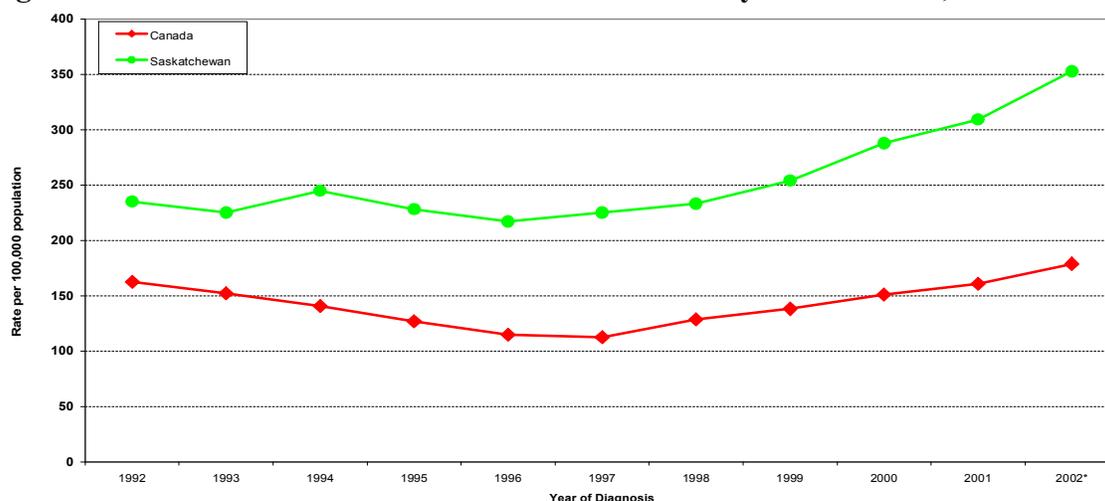


Table 3. Reported Chlamydia Rates Per 100,000 Population - Canada and Saskatchewan 1992 to 2003*

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*	2003*
Canada	162.4	152.1	141.0	126.8	114.8	112.7	128.8	138.2	151.1	161.0	178.9	180.9
Saskatchewan	235.1	225.3	245.0	228.1	217.1	225.1	233.1	254.2	287.9	309.2	352.7	371.6

Data Source for Canadian Rates: Division of Sexual Health Promotion and STD Prevention and Control, Bureau of HIV/AIDS, STD & TB, Health Canada 2001;
 Data Source for SK Rates: Saskatchewan Health Notifiable Diseases Database; Saskatchewan Health Covered Population 1992 to 2001
 * Preliminary data

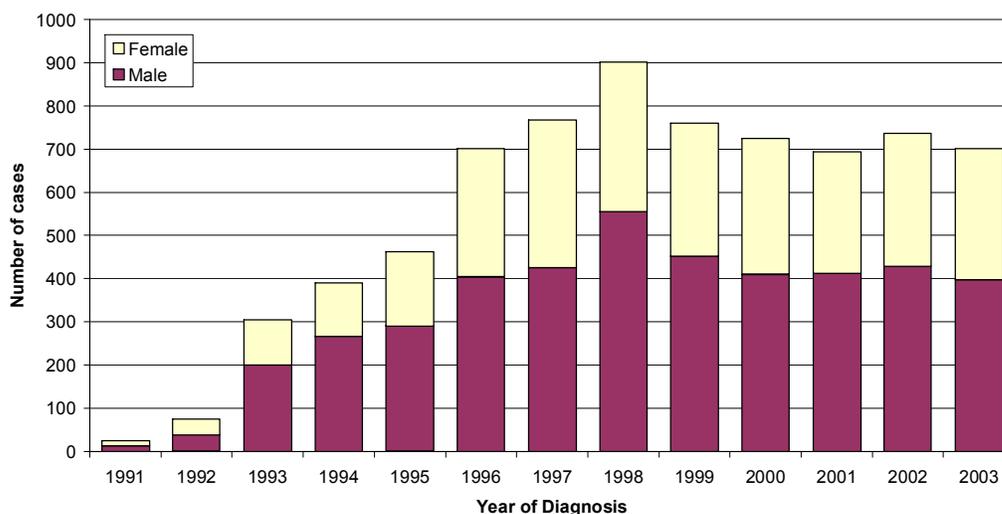
¹⁰ Public Health Agency of Canada: 2002 Canadian Sexually Transmitted Infections Surveillance Report. (Online) (Access 2006 May). Available from URL http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/05pdf/31s2_e.pdf.

¹¹ Weir E. Upsurge of Genital Chlamydia Trachomatis Infection. CMAJ. (online) Access 2005 June. Available from URL <http://www.cmaj.ca/cgi/content/full/171/8/855>.

Hepatitis C Infections

Injection drug users are at a substantial risk of contracting hepatitis C virus (HCV) through the sharing of contaminated needles. In Saskatchewan, a steady increase in the number of HCV cases reported to Public Health has been observed over time, as shown in Figure 5. Since the advent of blood donor testing for hepatitis C in 1999, the greatest proportion of new HCV infection now occurs among injection drug users (IDU). Risk factors such as tattooing, dentistry, surgical procedures, and hemodialysis have been implicated to varying degrees given the potential to transmit the virus through contaminated equipment. Populations such as incarcerated individuals, sex trade workers and infants born to HCV-positive mothers also have an increased risk of contracting hepatitis C. Household transmission may also occur, although the evidence is less definitive.¹²

Figure 5. Hepatitis C Cases by Year and Sex in Saskatchewan, 1991 - 2003

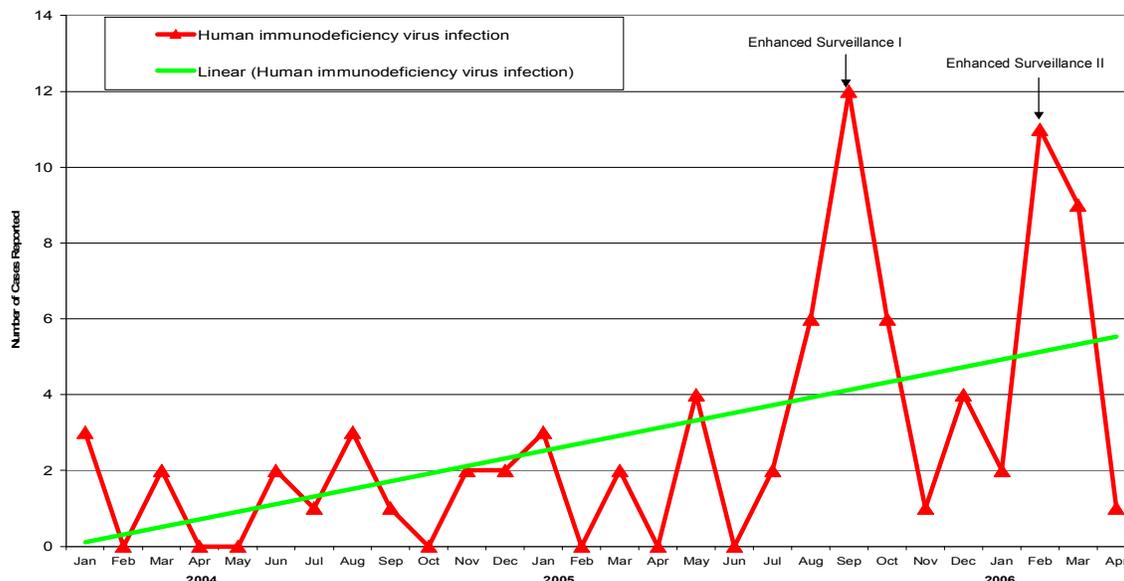


¹² Hepatitis C Surveillance in British Columbia - Are We Doing Enough? B Strauss, RN, MSc, Field Epidemiology Training Program, Population and Public Health Branch, Health Canada; M Bigham, MD, FRCPC, Communicable Disease Epidemiology, University of British Columbia Centre for Disease Control, Vancouver, British Columbia.

HIV in Saskatoon Health Region (SHR) 2004 - 2006

Since August 2005, SHR has reported a large number of new HIV case diagnoses. Thirty-two (32) new cases of HIV were diagnosed in the last half of 2005, compared to 12 new diagnoses in the whole of 2004. Figure 6 depicts this rising trend in new disease. Initial surveillance of the earlier cases pointed to unexpected close social characteristics amongst cases and this subsequently lead to the process of enhanced surveillance and contact tracing based on enquiry and follow-up of individual’s social networks. This process of investigation finally revealed a large cluster of 187 interconnected individuals. Fifty-eight (58) or 31% of these individuals were found to be HIV positive, of which 46 (25%) were newly diagnosed, and 84 (or 45%) hepatitis C positive (as discussed in detail in the next section).

Figure 6: New HIV Cases Reported by Month (2004 – 2006)



HIV Network Investigation in SHR (2005-2006)

Background

In late August 2005, in the process of conducting routine partner notification and referral services, nurses in the Sexual Health Program received a list of needle-sharing and sexual contacts from two closely related individuals residing in Saskatoon. Both of these individuals had both been diagnosed as HIV positive and hepatitis C positive in May 2005. Contact tracing from these two (putative index cases) initially elicited a list of 10 primary contacts, connected through unsafe injection-drug-use (IDU) practices and occasionally as sexual partners. Follow up among these initial contacts yielded several more new HIV diagnoses in August 2005.

In September 2005, the deputy medical health officer issued a public health alert to all medical professionals (Appendix A) in the Saskatoon Health Region, as well as to partner community service agencies (Appendix B) in Saskatoon and surrounding rural districts. This communication was intended to raise awareness of new HIV diagnoses and encourage more testing among individuals at risk for HIV infection as, in the course of this outbreak investigation, it became apparent that opportunities for HIV testing in the community were not being fully utilized; for example, in prenatal women known to use injection drugs.

Methodology of Enhanced Contact Tracing for HIV

Routine surveillance of HIV typically involves obtaining the names of contacts exposed through sexual intercourse and injection drug use with the new case. Beginning in August 2005, Public Health Services Sexual Health staff undertook an expanded case-finding approach by asking newly diagnosed HIV-positive individuals to identify others whom they believed to be at risk for HIV infection, but who were not necessarily directly connected to the case via needle sharing or sexual contact. HIV-positive individuals were encouraged to consider people in their social networks¹³ whom they thought might be at risk or who might need HIV testing, or people in their social circle whom they thought could benefit from being counselled and tested for HIV, or whom they might be “worried or concerned about”.

Through this outbreak investigation, it soon became apparent that many people, within the city of Saskatoon and recently diagnosed with HIV, had multiple connections to each other: familial, social, IDU and sexual. A network questionnaire was constructed, based on the tool used in I-Track (Enhanced Surveillance of Risk Behaviours among Injecting Drug Users in Canada) in Regina and other sites.

¹³ The rationale behind this expanded definition of contacts is the experience that cases frequently under report their needle sharing or sexual contacts for a variety of reasons. As they are the most informed on the social context in which needle-sharing activities occur, we hypothesized that cases who knew their risk behaviour may provide a reasonably accurate assessment of who else may be at risk for HIV infection in a close knit cluster of immediate family, relatives and friends.

Network Summary

From May 2005 to March 2006, 187 individuals were named as sexual, IDU or social contacts to newly diagnosed HIV-positive individuals. Table 4 summarizes the estimated mean age at 36 years (range 20 to 68) for men and 29.7 years (range from 9 to 66) for females. Information from the Sexual Health Program STI contact database was linked using the first two initials of first and last name and date of birth. Based on the non-nominal reporting system with its inherent limitations, it is estimated that approximately 58 individuals (31%) in this network are living with HIV. Based on the same linkages with the hepatitis database at least 84 individuals (45%) are estimated to be living with HCV. The mean age for HIV- and HCV-positive individuals was 32, slightly lower than the overall mean for this group.

Table 4. HIV Network Members n = 187

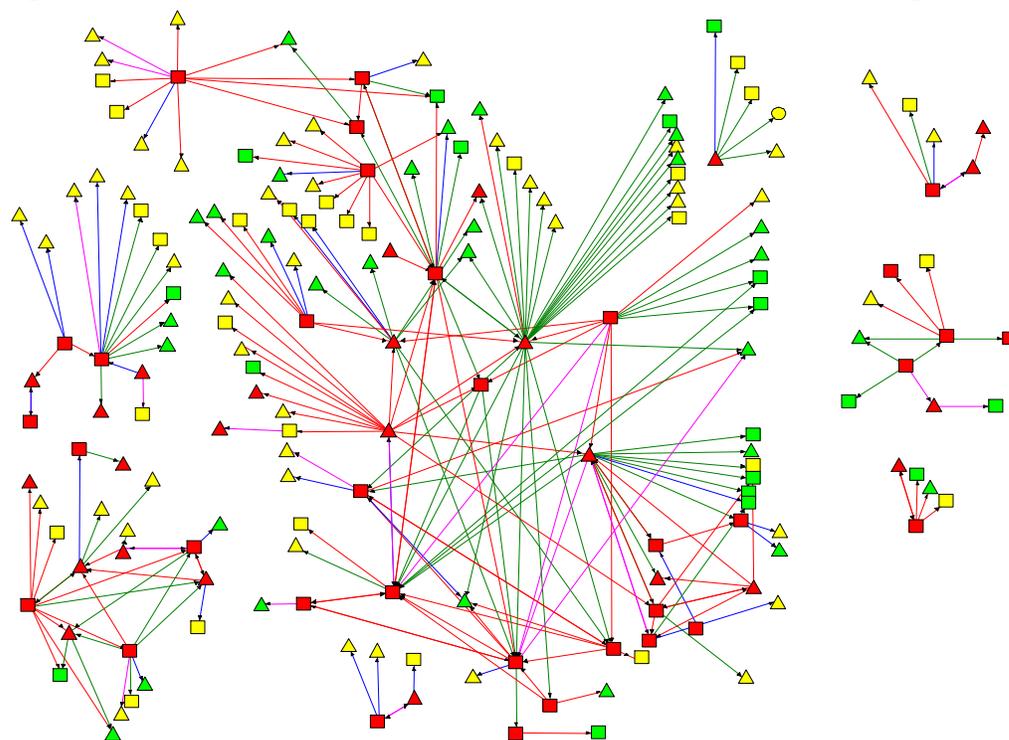
	Male	Female	Total
Gender	107	80	187
Age (mean, range)	36 (20 – 68)	29.7 (9 – 66)	32.8 (9 – 68)
Newly diagnosed HIV*	19	27	46 (25%)
HIV positive (in total)	26	32	58 (31%)
HCV positive	43	42	84 (45%)
Survey Completed %	40	33	73 (39%)

*between May 1, 2005 - March 28, 2006

In this network, 46 new HIV diagnoses or cases were received from May 1, 2005 to March 28, 2005 (25% of the network). An additional 12 cases were reported outside the Health Region, or previously reported inside or outside the province. Approximately 24 of the total 84 HCV cases identified in the network were newly reported since May 1, 2005.

All positive HIV cases were followed up and, if located, offered participation in the network study. Approximately 40% of the network was surveyed.

Figure 7. HIV Cluster Network March 2006, Saskatoon Health Region



Legend

	Male	Female	
HIV Positive	▲	■	Sexual contact
HIV Negative	▲	■	IDU/sexual contact
Unknown HIV sero status	▲	■	IDU contact
			Social contact

The above diagram (Figure 7), describes the network of 187 individuals named as IDU, sexual or social contacts to HIV positive cases from May 1, 2005 to the end of March 2006. These 187 individuals generated 261 links (many contacts were named, some more than once); the majority 110 (42%) were IDU contacts, followed by social contacts 93 (36%), sexual contacts 32 (13%), and IDU/sexual 24 (9%). It is important to note that one perinatal case of HIV was diagnosed within this network. By the end of March 2006, the main cluster involved approximately 110 individuals. Seven smaller satellites are not connected to the main cluster, but may eventually be connected through enhanced contact tracing. At least 10 HIV cases were initially identified through social contact tracing alone. Some of these individuals were later named as IDU and/or sexual contacts. The value of tracing new HIV cases through social contacts is that it may prove to be an effective and efficient route to accessing individuals whom standard programs may otherwise miss and linking them to services.

Saskatoon HIV Network Study

The network questionnaire further explored individual risk factors and behaviours to help better understand this outbreak. This questionnaire was administered to individuals newly diagnosed with HIV or named as social, sexual or IDU contacts to a person with confirmed HIV infection by nurses in the Sexual Health Program in the course of routine public health follow up and counselling. Individuals who agreed to complete the survey were compensated \$10 each. See Appendix C for the original questionnaire.

In February 2006, SHR received a contract from the Public Health Agency of Canada to interview the remaining social, sexual or IDU contacts of the 2005 HIV cluster, and any other social, sexual or IDU contacts of newly diagnosed HIV cases. Additional questions were added to the original survey (Part II), as well as a number of questions relevant to Public Health Services programs and SHR health service delivery. Individuals who agreed to complete this longer version of the survey and give blood and urine samples were compensated \$20. Individuals who had completed the first questionnaire (Part I) were followed up where possible and offered Part II of the survey. Those individuals who completed Part II of the survey and gave blood and urine samples were compensated an additional \$10 (in addition to the \$10 they received for Part I of the survey). See Appendix D for Part I and II of final questionnaire.

The entry criteria, for participation in the continued study in February 2006, were as follows: all newly diagnosed cases of HIV between May 2005 and March 2006 and individuals named as social, sexual or IDU contacts to a person with confirmed HIV infection during the same period. The full-length questionnaire was administered by nurses in the Sexual Health Program to HIV-positive individuals or contacts that had not been reached by February 2006. Part II of the survey (the additional questions) was offered to individuals who only completed the original HIV network questionnaire in 2005, if they could be found. Individuals who were not newly diagnosed with HIV or named as social, sexual or IDU contacts to a person with confirmed HIV infection were not included in the study. Individuals who came forward voluntarily and requested participation in the study (either due to risk behaviour or contact with an HIV positive person or other interest) were encouraged to pursue routine testing through the Sexual Health Clinic. If the individual was found to test positive within the study period, they were offered participation in the survey. The enhanced surveillance for this HIV cluster concluded March 3, 2006 to enable data analysis.

Survey Results

Between September 2005 and March 2006, 73 surveys were completed. Forty-two respondents completed the full length questionnaire, and 22 of the original 31 respondents, interviewed in 2005, were followed up to complete the additional questions. Table 5 provides a summary of key findings.

Table 5. HIV and Risk Behaviour Survey of Cluster Responders (n = 73)

	Male	Female	Total
Gender	40 (54%)	33 (45%)	73
Mean Age (range)	35.2 (20-67)	28.4 (17-48)	32(17-67)
HIV positive*	14 (35%)	23 (70%)	37 (51%)
Newly diagnosed HIV**	12	21	33
HCV positive*	32 (80%)	30 (90%)	62 (85%)
Newly diagnosed HCV**	12	10	22
HIV/HCV positive	14(35%)	23(70%)	37(51%)
Ever in jail	35 (88%)	18 (55%)	53 (73%)
Homeless in last year	8(20%)	6 (18%)	14 (19%)
Currently using contraception or birth control	Not asked	10 (32%)	10
Sex partners HIV positive	7 (18%)	7 (21%)	14 (19.5%)
Uncertain of HIV status of sex partners	6 (15%)	7 (21%)	13 (18%)
Number of sexual partners in past 6 months	Mean = 2 Median = 2	Mean = 9.5 Median = 2	Mean = 5.25 Median = 1
Used a condom last intercourse	17(42%)	17(52%)	34 (47%)
Work in sex trade in past 6 months	0	14 (42%)	14
Current IDU#	32 (80%)	33 (100%)	65 (89%)
Ever been an IDU#	37(93%)	33 (100%)	70 (96%)
Average age of IDU initiation (range)	22 (12 -48)	19 (12-36)	20.5 (12-48)
Ever used other's needle/gear	27(68%)	28(84%)	55 (75%)
Others used your gear in past 6 months	14 (35%)	19 (58%)	33 (45%)
Used needle exchange in past 12 months	30 (75%)	29 (88%)	59 (81%)
Can always get as many needles as required	22 (55%)	19 (58%)	41 (56%)

* Lab confirmed ** Diagnosed between May 1. 2005 and March 28, 2006

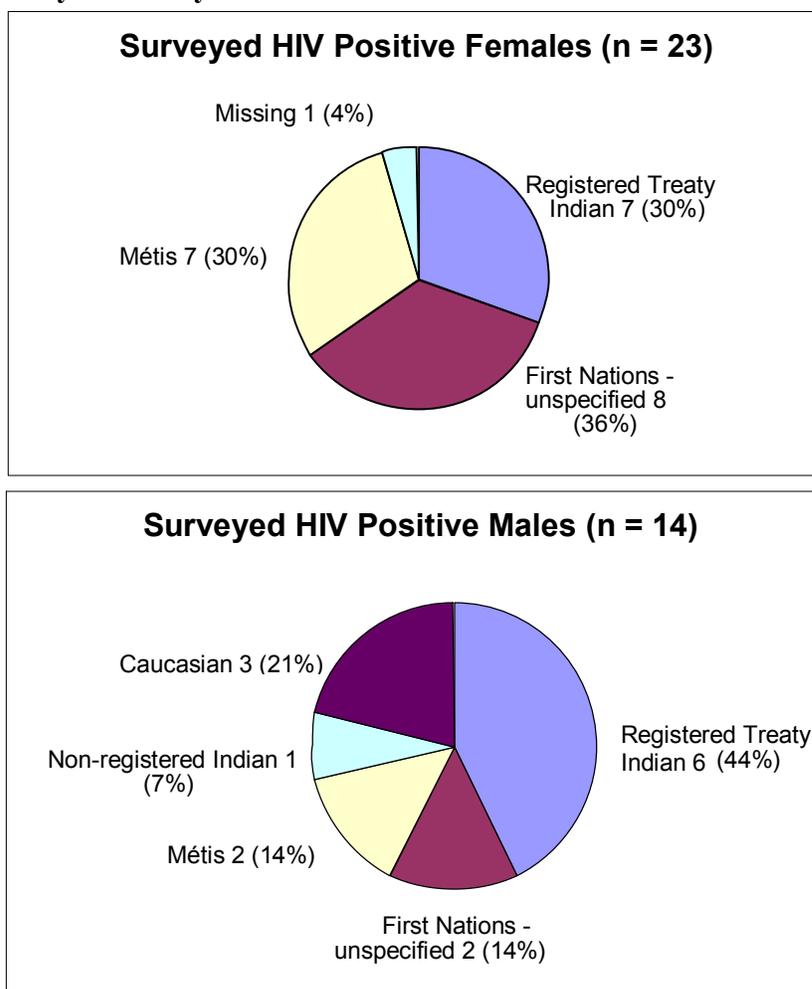
Demographics

Forty (40 or 54%) respondents were male and 33 (45%) were female. The mean age for women was lower than males, 28 years compared to 36 years. The majority of the respondents indicated residence in neighbourhoods around the inner city or core neighbourhoods on the west side of Saskatoon. Fourteen (14 or 19%) of respondents indicated they had been homeless in the last 12 months.

Ethnicity

Although individuals of aboriginal ancestry make up approximately 10% of the population in the Saskatoon Health Region, the majority (75%) of the individuals involved in this study self reported that they were of aboriginal ancestry, which includes First Nations groups, registered and non-registered treaty Indians and Métis. Aboriginal ancestry was reported in the majority of surveyed males (63%) and females (88%). Ninety-six percent (96%) of surveyed HIV positive females were aboriginal and 79% of surveyed HIV positive males were aboriginal (includes First Nations, registered treaty Indians and Métis).

Figure 8. Ethnicity of Surveyed HIV Positive Females & Males



Health Status

Of the total respondent population, 70 individuals (96%) had a history of IDU and almost 90% were currently injecting. Between May 1, 2005 and March 28, 2006, there were 33 newly diagnosed cases of HIV identified among the study group. Four additional cases of HIV were previously reported or reported outside the Health Region. Four individuals who participated in the survey refused testing, all of whom were incarcerated. It is important to note that four individuals who tested negative in the fall of 2005 were positive when retested in 2006¹⁴. In total, 37 (51%) of the respondents were confirmed HIV positive and all of them were found to be co-infected with HCV. Hepatitis C prevalence was higher in the total respondent group, approximately 85%.

HIV Co-infection with STIs and HCV

In March, 7 respondents (10%) tested positive for Chlamydia (5 female [15%] and 2 male [5%]). Four of the respondents with confirmed HIV were co-infected with Chlamydia and one respondent was co-infected with gonorrhoea (all female), making a total of 5 respondents (7%) co-infected with an STI and HIV. Of the 23 HIV-positive women, 12 (52%) had histories of lab-confirmed STIs (dating back to 1999), compared to 4 (29%) of the 14 HIV-positive males. Though not statistically significant, women with a history of a STI were almost twice as likely to be HIV positive as women without STI history (OR=1.95, $p = 0.4$). Irrespective of sex, a history of an STI increased the odds of being HIV infected by 1.4 ($p=0.4$). Sex was a confounder (AOR=1.14, $p =0.8$) meaning the odds of being HIV positive are different, depending on sex. Caution must be used in interpreting this result as numbers are too small to be statistically significant and also women tend to be diagnosed with STIs more frequently than men.

Health Seeking Behaviour

In February 2006, respondents were asked if they were HIV or HCV positive (e.g., aware of their diagnosis). A very low proportion of those who indicated knowledge of their HIV or HCV status were under the regular care of a physician or infectious disease specialist. Of the 25 who indicated they were HIV positive, only 11 (44%) were seeing a doctor, an approximately equal number of females and males. Of those who indicated they were HCV positive, 19 (34%) were seeing a doctor.

Of the total 36 HIV or HCV positive respondents who indicated they were not seeing a doctor or ID specialist, 12 (33%) indicated not having a doctor, not knowing how to access a doctor, being scared of a doctor's reaction, not wanting to go to a doctor or being too far away. Two (2) respondents indicated addictions treatment as being in the way of seeing a doctor regularly. Five (5 or 13%) respondents indicated having no signs or symptoms of illness or being recently diagnosed as reasons why they had not been seen by a medical care provider. Of the 37 confirmed HIV-positive individuals 13 (35%) were seeing a doctor regularly. Of the 62 HCV-positive individuals 18 (29%) were seeing a doctor. Both male and female sexes were equally represented in these groups who reported that they regularly sought clinical care for their health condition.

¹⁴ It is assumed that when initially contacted and tested some individuals were still in the window period for HIV testing which underscores the importance of follow-up testing protocols.

IDU Risk Behaviour

All 33 (100%) female respondents and 32 (80%) of the male respondents indicated they were current injection drug users. The average age of initiation to injection drug use was lower for women, 19 years old compared to 22 years old for men. The actual IDU initiation usually took place in the presence of someone closely related to the respondent. The highest proportion of respondents indicated that a friend had been with them at their initiation (30%), followed by siblings or another relative (27%), or a sex partner (20%). Male and female proportions were very similar for all categories. No women and 5% of men indicated they were initiated to injection drugs with a stranger. The location of initiation most often indicated was a friend's place (33%), own home (20%) or a relative's home (18%). Bars, restaurants, streets or public washrooms were seldom indicated, although three male respondents and two female respondents (7%) indicated a shooting gallery¹⁵ as the place of initiation. Three of the respondents indicated three different hotels, two of which are no longer in operation.

The location of current injection drug use most often indicated from the past six months was the user's own home (60%), or a friend or relative's home (40%). Significantly more women indicated their own home as the usual location of injection compared to men ($p=0.05$). A few women (9%) indicated usually injecting at a shooting gallery. Hotels were not specifically identified. Needles from hotels/motels, recovered by Fire and Protective Services in Saskatoon, have accounted for an average 12% of loose needles annually over the past 5 years; however shooting galleries in Saskatoon can also be in private houses where drugs are often available. A greater proportion of women than men indicated ever using someone else's needles or gear ($p=0.08$). In their lifetime, women reported having used friends', sex partners' or parent's gear more often than men. Very few respondents (4%) indicated ever using a stranger's gear. Women also indicated others used their gear more often than men.

The risks involved in needle sharing are generally understood in this population. The reason for sharing needles most often indicated was "didn't have a needle on me" (42%). The second most indicated reason was "couldn't get a new needle when needed one" (22%). Relatively few respondents indicated they shared because they were with their sex partner (8%) or because they wanted to show bonding. Only four males (10%) and no females indicated the latter as a reason for sharing needles. Very few indicated they shared needles because they didn't know where to get clean needles (4%). About 10% indicated they shared because of their "stuff getting mixed up." Slightly more than half the respondents indicated that they could always get as many needles as they needed. The median number of new needles needed in a month was reported as 100 individual units.

Most injection behaviour is done in the presence of others, (about 48% of men and 58% of women indicated they usually inject with other users present). Respondents indicated shooting up with an average of three (range 1-12) other users present at the time. Slightly

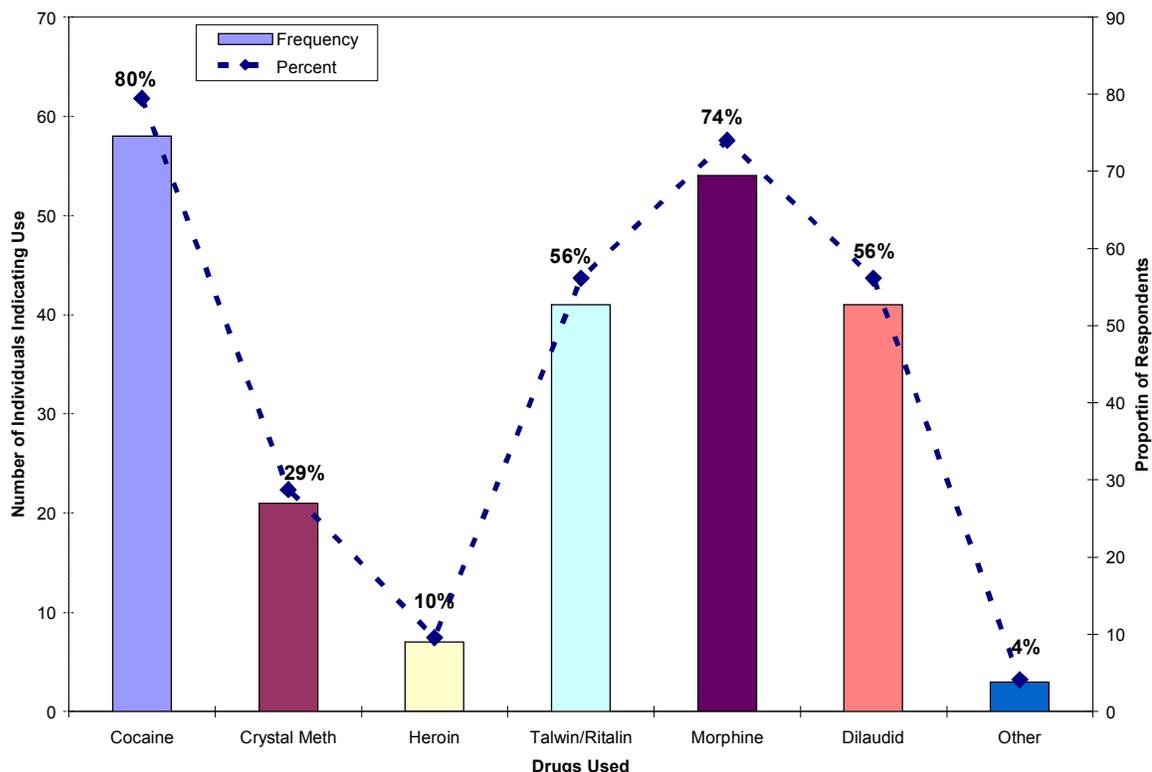
¹⁵ Shooting galleries are described as **known places** where one can both acquire illicit drugs and "shoot-up". Thus, shooting galleries represent a significant danger for anonymous needle sharing and have been thought to represent places where individuals from discreet locations mix and are presented with opportunities where high risk behaviours can overlap e.g., "bridging situations".

more women (21%) than men (17%) indicated that they usually shoot up alone. About the same proportion of men and women (20%) indicated usually shooting up with a sex partner.

Drugs of Choice

The injection drugs most often indicated by respondents were cocaine (80%) and morphine (74%), followed by Talwin/Ritalin (56%) and Dilaudid (56%). Talwin was rarely used among those surveyed. While cocaine is indicated more often, it should be noted that 67% of those currently injecting morphine are injecting daily, and only 36% of respondents who are currently injecting cocaine are injecting daily.

Figure 9. Injection Drugs Used



Sexual Risk Behaviour

Most of the surveyed respondents indicated heterosexual preferences. Only one male respondent indicated same-sex partners. The mean number of sex partners for males was 2, and the mean number for females 9.5. Fourteen (14 or 42%) women indicated working in the sex trade in the past six months. Eight (8 or 57%) of the women who worked in the sex trade said they always used a condom, and one respondent said she sometimes used a condom. One male respondent said he never wore a condom with a sex trade partner.

Just over half of the women and less than half of the men indicated having used a condom at the last intercourse. About a third of male respondents and a third of female respondents said they never used a condom with their regular sex partner, whereas twice as many women (20%) said they always used a condom with a sex partner compared to men (11%). About one third of male and female respondents indicated they were not sexually active.

Only about one third of female respondents indicated they were currently using any form of contraception or birth control. Of the women who were confirmed HIV positive, less than 40% were using any form of contraception; over half of them (62%) indicated using a condom at the last intercourse. About 20% of males and females indicating having sex partners who are known to have HIV, and about 20% indicated they were uncertain of the HIV status of sex partners.

Risk Knowledge and Program Utilization

The majority of respondents (92.5%), especially women (97%), knew where to get contraceptive services and free condoms. Over 70% of men and women indicated getting needles from the Health Works outreach van in the past year. Surprisingly, over 60% of men and women indicated buying needles at a drugstore. Over 80% of men and women knew the risk from sharing a spoon or cooker. Almost 90% of female respondents and 75% of male respondents indicated using needle exchange services in the past 12 months. The most frequently indicated barrier to using the needle exchange was it being “closed or unavailable when needed” (49%). The location was also cited as a barrier, more often for men (37%) than women (18%). Relatively few respondents indicated “people will see me” as a barrier to using the needle exchange, although more women (15%) than men (5%) indicated this reason.

Sixty-three (63) respondents were asked if they had sought help from addictions programs. The majority (67%) indicated they had sought help at least once, including 21 of the women surveyed (72%) and 22 men (64%). The mean number of different programs for men was 1.6, and for women 1.5, and ranged between 1 – 5 programs e.g., methadone treatment, counselling, etc.

Of the 43 respondents who had sought help, 2 individuals (5%) were currently enrolled in addictions programs, 14 (33%) did not finish the program, 14 (33%) relapsed within a year of the program, and 8 (19%) could not access the program. More women (20%) couldn't access addictions programs than men (6%). Reasons for being unable to access a treatment program included childcare (indicated by one male) and transportation (indicated by one female). No respondent indicated “culturally inappropriate” or “uncomfortable with location” as a barrier to access; however, responses related to access to addictions programs were self-initiated and may not have been captured. The most frequently indicated reason for the lack of access for addictions treatment services was waiting lists, either still being on them, being too long, or waiting for a counsellor as a prerequisite to referral.

Discussion

Injection drug users (IDUs) are an important force in the continuing epidemics of both HIV and HCV infection and their devastating sequelae. IDUs become infected and transmit HIV to others in two, often interconnected, ways:

- high-risk drug use: sharing blood-contaminated injection equipment, such as needles, water, spoons, and cottons (used as filters);
- high-risk sex: unprotected sex, sex with many partners, and failure to treat STIs.

Women who become infected with HIV through sharing needles or having sex with an infected IDU can also transmit the virus to their babies before or during birth or through breastfeeding.

The responses received from this sample to date clearly indicate that IDUs in our community are engaged in multiple high-risk sexual and injecting behaviours. Needle sharing is driven by the urgency for a fix, as repeated by several respondents, "particularly in the morning hours when the feeling of drug sickness was worst!"

Although many respondents indicated that they could get as many clean needles as required, for others it involves purchasing needles at a pharmacy which may divert scarce household funds to further support drug addictions. It is also not clear what needle sources are used when serious cravings occur outside of one's home, e.g., at a friend's house or even on the street, or at times when the needle exchange service is closed. Perhaps these are the times that otherwise motivated individuals lapse. Clearly, there remain some barriers to using needle exchange services.

More effective emphasis on other available preventive approaches will help IDUs manage some of the other health problems their behaviour puts them at risk of, such as unintended pregnancies and sexually transmitted infections (STIs). Access to addictions treatment and care is essential for this group. Society as a whole will benefit as well, because reduced disease transmission among IDUs means reduced transmission among their sex partners, their children, and ultimately, among the general population.

Workload Issues

The surveillance approach currently employed, which dedicates additional staff time to follow up on the social, sexual and IDU networks, has clearly yielded more information and, more importantly, more new HIV diagnoses than more traditional contact tracing has produced in the past. However, this strategy is not without a cost to core programs in this service area. Beginning in September 2005, Sexual Health nursing time was re-directed to ensure coverage for home visits, notifications and follow-up activities. This resulted in a temporary reduction of Sexual Health nursing time in the clinic by one third. The ability of Sexual Health nursing staff to undertake testing where and when their clients are willing is a critical component to enhance testing uptake in this marginalized community.

To date, response to this HIV cluster has been limited to enhancing surveillance activities. In order to prevent further transmission of HIV in this high-risk community, an exploration of other health promotion strategies is required, in addition to education programs. Partnering with other community agencies and services engaging the IDU target population will be essential in developing appropriate outreach strategies.

Network Analysis and Risk-Reduction Strategies in High-Risk Groups

All HIV-positive individuals associated with this cluster are current injection drug users and many are engaged in multiple high-risk activities, including commercial sex work. Network approaches for understanding HIV infection among IDUs are based upon the two functions of networks: at-risk environments where disease transmission occurs, and as social environments where behaviour change and influence can be generated and transmitted¹⁶. Using the social network not only provides a means to explore and follow up new disease contacts, it helps identify individuals who may be "central" or have some influence on other members of their network. These individuals within the primary cluster have been key "nodes" for identifying others at risk for HIV infection, and for illustrating both social and IDU/sexual links between members of the network. Some of these individuals could be recruited as peer workers, to regularly assist Sexual Health program staff in locating contacts and encouraging network members to be tested for HIV and to seek appropriate care.

A substantial proportion of individuals in the current cluster in Saskatoon are of First Nations heritage, and previous research from Vancouver has identified aboriginal ethnicity as an independent risk factor for elevated HIV incidence rates among female IDUs¹⁷. Recruiting and training First Nations community leaders to deliver HIV prevention education and encourage HIV testing and counselling among high-risk individuals may be more productive and culturally acceptable than standard public health education campaigns.

In this IDU group, findings to date suggest that drug use takes place within private homes and often in the company of close friends, sexual partners, or family members. Injecting in public settings or with strangers is not frequently reported. It has been hypothesized that the perception of risk associated with sharing needles or gear is diminished, or the imperative to demonstrate trust by sharing gear is increased, in these intimate settings.

The need for a supervised injection site to meet the needs of IDUs in the Saskatoon community is a question that has been posed several times. On evaluation, the Vancouver safe injection site has been found to prevent some acute drug use complications, such as overdose and acute inflammation of injection sites due to improved safe injection practices, and to reduce some of the harms associated with injection drug use such as discarded

¹⁶ Neaigus A, Friedman SR, Curtis R et. al. The relevance of drug injectors' social and risk networks for understanding and preventing HIV infection. *Soc Sci Med* 1994; 38 (1): 67-78.

¹⁷ Spittal PM, Craib KJP, Wood E et. al. Risk factors for elevated HIV incidence rates among female injection drug users in Vancouver. *CMAJ* 2002; 166 (7): 894-9.

syringes and needles, and public intoxication¹⁸. The linkage and referral of high needs clients to other health care services is certainly an area of great interest.

Working with HIV-Positive Individuals

Many newly diagnosed HIV-positive individuals in SHR not only have to come to terms with the diagnosis of a new chronic illness, but also need to begin to incorporate substantial changes in adopting behaviours that protect them from re-infection, and prevent further disease transmission. HIV-positive persons with alcohol or other substance use problems, mental health problems, who lack social support or are homeless, are more likely to delay entry into care as they struggle with the realities of daily existence. In our cluster investigation, several previously known HIV-positive individuals were still practicing continued and on-going high-risk behaviour i.e., needle sharing and multiple sexual partners, despite already having had some contact with the healthcare system and being informed of their HIV-positive status. Integrating ongoing prevention counselling into routine HIV care can reduce transmission-risk behaviour among people living with AIDS (PLWA) as they will have ongoing support for positive behaviour.

HIV-Related Denial, Stigma and Discrimination

HIV is a reality in several communities in SHR. In the course of conducting this investigation, it became apparent that there remains significant fear of discrimination and stigma associated with a new HIV diagnosis. This stigma and discrimination stands in the way of people protecting others from being infected with HIV. It also prevents people from coming forward to get tested for HIV. Reducing the stigma and discrimination related to HIV/AIDS may not be easy. A plan of action is clearly needed. Policies to cope with threats of self harm, or threats of violence directed at others are urgently needed. General consistent public education which clearly explains HIV-transmission risk and promotes awareness in new developments in HIV treatment will go a long way in addressing some of these concerns.

The Continuum of Care

Access to treatment for addictions and mental health services are key aspects to addressing the physical and mental health concerns that IDUs must contend with. Injection drug use is an important route for the transmission of HIV and hepatitis C (HCV) in our community, particularly affecting minorities and women (Saskatoon Health Region 2004)¹⁹. Access to addictions treatment services for IDUs is critical, because it can reduce some of the impulsive and unsafe behaviours associated with intoxication, such as needle sharing and unprotected sex. Addictions treatment offers an important gateway for access to the diverse

¹⁸ http://www.vch.ca/sis/docs/sis_year_one_sept16.pdf

¹⁹ Saskatoon Health Region, S. H. P. (2004). "Street Health Program Highlights Document: Program Report for April 1, 2003 - March 30, 2004."

services an IDU may need, such as psychiatric assessment, social services, HIV prevention education and HIV or HCV therapy. Apart from the risk of exposure to a number of bloodborne pathogens, IDUs also risk acute drug overdose, vein damage, bacterial infection (resulting in tissue abscess or endocarditis), and an increasing level of drug dependence²⁰, which inhibits normal social and familial functioning. Within treatment programs, successful counsellors are able to establish a positive, therapeutic relationship with clients, which will help clients to plan ahead on how to manage their addictions and deal with relapse.

Working with High-Needs Clients

It is an unfortunate reality that some of the more challenging HIV-positive IDU clients also suffer from some serious social problems like homelessness and domestic violence, in addition to their addiction. In order to make HIV care a priority in their lives, some of these very disruptive social issues need to be addressed to enable individuals to begin functioning in the community again.

²⁰ National Institute for Drug Abuse (NIDA). <http://www.drugabuse.gov/consequences/>

Recommendations

Research and field reports on implementing interventions for IDUs indicate that HIV transmission among IDUs can be prevented, slowed, and even stopped²¹. These findings have generated guidelines and principles for designing and implementing feasible, sustainable, and effective interventions. Intervening early, with multiple strategies, before HIV prevalence among injection drug users reaches 5%²¹, can prevent epidemic spread and its consequences. Intervening as early as possible, even after prevalence has increased substantially, can prevent the further spread of HIV in injection drug populations and transmission into other populations.

Leadership and commitment to resources are critical for the success of HIV prevention programs for IDUs. Programs need to address societal biases, stereotypes and beliefs about drug users, and specifically address stigma and discrimination.

The Saskatoon Health Region (SHR) must enhance its systems in order to keep pace with the rapidly increasing caseload of new HIV positive individuals, more addicted intravenous drug users, and more individuals who present to care with acute or chronic complications of intravenous drug use. To drastically reduce the spread of HIV, SHR must increase prevention activities that are effective and that reach populations most at risk, as well as do what is necessary to ensure that HIV infected individuals receive timely and appropriate care, including treatment and other services. Since nearly all HIV infections in SHR occur through the sharing of HIV-contaminated needles or unprotected sexual intercourse, prevention efforts should focus on reducing these risky behaviours. The following are specific recommendations with immediate programmatic implications.

Comprehensive Surveillance

- Move to a nominal testing and reporting system for HIV in the province. When investigating a large cluster that includes many members of the same family, similar initials quickly arise and make it confusing when communicating this information with those who need to know.
- Revise the provincial HIV Case Report Form to include relevant questions related to the specific risk behaviours of IDU (e.g. shared equipment, access to new needles).
- Include recall of social contact names for those involved in IDU risk behaviour.

²¹ CDC. (2004) Preventing HIV Transmission in Drug Using Populations

Harm Reduction Strategies

- Introduce a fixed needle exchange site in the vicinity of 20th Street West and Avenue R South in Saskatoon.
- Increase needle exchange and testing services on Saturdays, Sundays and Mondays.
- Offer adequate injection supplies to cover usage needs for a maximum of 4 days for unregistered clients with Street Outreach van.
- Promote registration with Health Works outreach services and interaction with other programs, as this enables PHS to better tailor other aspects of care (e.g., hepatitis B and A immunization).
- Consider expanding provision of other injection drug equipment such as cookers, cotton and water.
- Use needle exchange visits to reinforce the message that preparing or sharing drugs for injection pose additional risks for HIV transmission, even with close family members.
- Provide condoms in a wide variety of settings, including the infectious disease clinic and community-based organizations (e.g., EGADZ; Friendship Inn; drug and alcohol treatment programs; bars and clubs; bathhouses and other commercial sex venues; schools; correctional facilities; doctors' offices, clinics, and all healthcare facilities).

Testing and Continuing Care

- Provide access to rapid voluntary HIV testing.
- Offer routine HIV testing for all HCV-positive cases and contacts and STI cases that are known to inject drugs.
- For those HIV contacts that initially test negative, apply intensive efforts to retest at 3 and 6 months.
- Provide ongoing preventive behaviour support for those who test HIV positive. This needs to be institutionalized, not only in public health practice, but also in ongoing clinical care where providers will routinely visit and discuss safe needle use and safe sexual behaviour with clients.
- Provide ongoing preventive health counselling, particularly among newly-diagnosed HIV cases. Persons living with AIDS (PLWA) and HIV-positive individuals need continuous, supportive counselling to enable them to come to terms with their chronic health condition and make the required behavioural changes.
- Reduce barriers by assisting clients with transportation needs and fast-tracking priority clients to supportive services, such as the Infectious Diseases Clinic, methadone treatment, and Mental Health and Addiction Services.
- Discuss with clients the new opportunities offered by the family residential treatment services through Mental Health and Addiction Services.
- Explore the feasibility of Infectious Diseases services in the core area of the city.
- Explore increasing the availability of Infectious Diseases Clinic appointments in the afternoons.

- Explore a shared nursing position with the Infectious Diseases Clinic and the Street Outreach Program to facilitate the continuum of care between acute care and community services for HIV-positive cases.
- Employ a “case manager” approach to manage complex individual HIV-positive IDU cases.
- Increase social service opportunities for those in very complex, high-need situations by providing housing, transportation services, childcare and vocational training opportunities.
- Offer low-threshold access to drug treatment when the individual is ready.
- Link HIV/AIDS programs to other health and social programs, as appropriate, to ensure an integrated approach to program implementation and to address the complex health needs of people living with and vulnerable to HIV/AIDS .
- Use the “stages of change” or other appropriate models of behaviour change to assess, monitor and guide client progress in getting to care or taking action to regularly abstain from drug use.
- Employ an outreach addictions counsellor in the Street Outreach van to facilitate movement through the behaviour change model and to fast track to appropriate addictions services when client is ready.
- Consider an incentive, such as a small food voucher (as an alternative to money) for clients who follow through with their ID care plan.

Primary Prevention and Health Education

- Support teachers to adhere to the HIV/AIDS curriculum in Grades 1-12, as mandated by Saskatchewan Learning.
- Use identified peers from the social network model (e.g., the central nodes) to help develop and deliver positive preventive health messages.
- Use syringes, condoms and other preventive health tools in the context of a social marketing strategy that links behaviour change or correct behavioural information to services. For example, messages referring to the danger of needle sharing “even with close family and friends”.
- Recruit and train First Nations community leaders to deliver HIV prevention education, and to encourage HIV testing and counselling among high-risk individuals.
- Develop social marketing campaigns that address stigma and discrimination.
- Explore policies that support healthy sexual behaviour and prevention of STIs, including HIV.

Community Outreach

- Increase dedicated nursing and social work hours to provide consistent, intensive outreach efforts to locate cases and contacts and others at risk. The provision of service will include comprehensive health, social assessment and interventions such as immunization, STI and other bloodborne pathogen testing, treatment, follow-up and referral using a “one-stop” shopping model. In SHR, enhanced funding is required to increase staffing as follows:
 - 1.0 FTE Public Health Nurse
 - 0.5 FTE Outreach Worker
 - 0.5 FTE Support Staff

Other Supports

- Provide staff with current information and regular skills training on intravenous drugs, crystal meth, substance use, and effective behaviour change.
- Consider other additional supports for behaviour change, including working with existing community-based organizations such as AIDS Saskatoon, PLWA and Avenue Healthcare Services, using peer educators as models of preventive behaviour.
- Implement a comprehensive electronic monitoring system to track provision of care for IDUs along the prevention/treatment continuum.

Appendix A

Statement on New HIV Diagnoses in SHR

Letter to Physicians



**Saskatoon Health Region
Public Health Services**
Office of the Deputy Medical Health Officer
101 – 310 Idylwyld Drive North
Saskatoon SK S7L 0Z2
Phone: 655-4478 Fax: 655-4414

September 16, 2005

**PUBLIC HEALTH ADVISORY:
STATEMENT ON NEW HIV DIAGNOSES IN SHR**

Saskatoon Health Region is currently experiencing a dramatic increase in new HIV diagnoses. Our investigations and intensive follow up on recent diagnoses have resulted in 23 new HIV infections being reported in our Health Region from January 1 to September 1, 2005, compared to 11 new cases during the same period in 2004.

Factors associated with HIV risk:

- A history of illicit intravenous drug use
- Unprotected sexual contact with high-risk sexual partners
- Infants born to mothers who may have been infected with HIV

We are now starting to see babies born to HIV positive mothers. Prompt treatment can minimize the risk of HIV transmission between a mother and her infant; therefore, it is very important that health professionals encourage all expectant mothers to seek testing. **For expectant mothers at risk of HIV infection during pregnancy, HIV testing should be repeated.**

- Counselling and HIV testing should be offered to **all** pregnant women in Canada, as early in their pregnancy as possible.
- **All** individuals who identify themselves as being at high risk for HIV infection, through injection drug use or sexual contacts, should be counselled about the reduction of high-risk behaviours.
- For high-risk women whose initial HIV test result is negative, testing should be repeated later in pregnancy.
- If the mother has not been tested during pregnancy, every effort should be made for expedited testing of the mother and newborn.

For further information on HIV testing in pregnancy, consult the CMAJ clinical guidelines available at: <http://www.cmaj.ca/cgi/reprint/158/11/1449>

What is being done?

Public Health Services is devoting additional resources to enhance our outreach and partner notification activities, and to encourage all individuals who may be at risk for HIV infection to get tested and know their status. Additional testing sites will soon be available in Saskatoon.

What can you do?

Physicians in Saskatoon Health Region may experience an increase in patients presenting for HIV testing. Please take every opportunity to test individuals who think they are at risk of HIV infection.

For health professionals who work with people at high risk of HIV infection, especially injection drug users, their partners and family members, **please share the message that:**

- HIV is being transmitted in our community and the common routes of transmission are through injection drug use, unprotected sexual contact, and perhaps from mother to child.
- Revisit the following preventive health messages with all of your patients:
 - Always practice safe sex.
 - If you inject drugs or have sexual contact with someone who injects, you should get tested for HIV so that you know your HIV status, as early and appropriate treatment is available and can delay progression of serious complications.
 - Sharing needles or gear is NEVER safe, even if it's with family members or someone you know well.
 - If you need clean needles, they are available from the **Sexual Health Clinic at 100 – 310 Idylwyld Drive North and from the Street Health Van (221-2442)**.
 - KNOW YOUR STATUS TO PROTECT YOURSELF AND THE PEOPLE YOU CARE ABOUT.

Further Information:

To learn more about HIV prevention and treatment, needle exchange programs or testing, contact Public Health Services at **655-4642**.

Further information and reference resources will be made outlined in the September edition of **Public Health Matters – The MHO Newsletter**.

Sincerely,

Original signed by

Dr. Johnmark Opondo
M.B., ChB., M.PH.
Deputy Medical Health Officer

Appendix B

Statement on New HIV Diagnoses in SHR

Letter to Partner Community Service Agencies



**Saskatoon Health Region
Public Health Services**
Office of the Deputy Medical Health Officer
101 – 310 Idylwyld Drive North
Saskatoon SK S7L 0Z2
Phone: 655-4478 Fax: 655-4414

September 16, 2005

STATEMENT ON NEW HIV DIAGNOSES IN SHR

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Factors associated with HIV risk:

- A history of illicit intravenous drug use
- Unprotected sexual contact with high-risk partners
- Infants born to mothers who may have been infected with HIV

Recently, we have seen babies born to HIV positive mothers. Prompt treatment can minimize the risk of HIV transmission between a mother and her infant; therefore, it is very important that health professionals and community agencies encourage expectant mothers, who may be at risk for HIV infection, to seek medical care.

What is being done?

Public Health Services is devoting additional resources to enhance our outreach and partner notification activities, and encouraging all individuals who may be at risk for HIV infection to get tested and know their status. Additional testing sites will soon be available in Saskatoon.

What can you do?

For community organizations that work with people at high risk for HIV infection, especially injection drug users, their partners and family members, **please share the message that:**

- HIV is being transmitted in our community.
- If you inject drugs or have sexual contact with someone who injects, you should be tested for HIV.
- Sharing needles or gear is NEVER safe, even if it's with family members or someone you know well.
- If you need clean needles, they are available from the **Sexual Health Clinic at 100 – 310 Idylwyld Drive North and from the Street Health Van (221-2442).**
- **KNOW YOUR STATUS TO PROTECT YOURSELF AND THE PEOPLE YOU CARE ABOUT.**

Further Information:

To learn more about HIV prevention and treatment, needle exchange programs or testing, contact Public Health Services at **655-4642**.

Sincerely,

Original signed by

Dr. Johnmark Opondo
M.B., ChB., M.P.H.
Deputy Medical Health Officer

Appendix C

Original HIV Follow-up Network Questionnaire

HIV Follow-up Network Questionnaire
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In this interview, I will be asking you questions about yourself and your lifestyle. Anything you tell me during this interview will be kept totally confidential. Some of them ask about personal and sensitive subjects, so I want to remind you that you do not have to answer any question that you do not want to.

- 1** How many sex partners have you had in the last 6 months?
_____ #
- 1.1** The last time you had sexual intercourse, did you use a condom?
 Yes
 No
- 2** In the last 6 months have you worked in the sex trade (sex for money, gifts, drugs or a place to sleep)?
 Yes – How many times? _____ #
 No -> probe for recall
 Unsure / don't remember [probe for recall; reassure confidentiality]
- 3** How many of your sex partner(s) in the last 6 months were HIV positive? (includes regular, casual and sex trade partners)
 _____ #
 Unsure/Don't know

For women of reproductive age (15 to 45 years only) - men and the rest go to Question 5.

- 4** Are you taking or using any form of contraception or birth control?
 Yes
 No
 Unsure/Don't know
- 4.1** Do you know where you can get any form of contraception or birth control?
 Yes
 No
 I do not need contraception
 Unsure/Don't know
- 5** If you use injection drugs, how many times do you inject?
 Daily _____ #
 2 – 6 times per week
 Once weekly
 Don't use injection drugs Skip to question 13.
- 6** When you last injected/shot up, did more than one person draw up their hit from the same cooker?
 Yes
 No
 Don't know

6.1 Do you think that there are any risks when more than one person draws up their hit from the same cooker?

- Yes
- No
- Don't know

7 When you injected (during the last 6 months), were you usually:

- Alone
- With your sex partner
- With other users

How many other users did you *usually* shoot up with?: _____

8 When you last injected / shot up, where did you obtain the syringe / needle from?

- Clean / new needle from a needle exchange program or other source of new needles
- I reused a needle I already had
- Borrowed a needle from friends or relatives
- Borrowed a needles from a stranger
- Don't know

9 Where do you usually inject/shoot up (during the last 6 months)?

- Own home
- Friend's place
- In a park
- In a bar/restaurant
- In a public washroom
- In the street (alley, doorway, etc.)
- Car/vehicle
- Shooting gallery
- Prison/jail
- Other: _____
- Don't remember

10 In your life, have you ever used a needle/gear that someone else had already used?

[Prompt that this includes sex partners/friends/family]

- Yes **What part(s)?**
 - Needle / Syringe
 - Cotton / Filter
 - Water
 - Spoon (cooker)
- No *Skip to Question # 11*

10.1 In your lifetime, whose needles/gear did you ever use?

- sex partner
- friend
- Parents or siblings
- Uncle, Aunts, cousins
- dealer
- inmate
- stranger
- other (specify:) _____

10.2 When you used a needle/gear that someone else had already used, what are some of the reasons why: [don't read the list, prompt if necessary]

- Did not have one "on me"
- Didn't know where to get new ones
- Couldn't get a new one when I needed it
- I sold all my needles/gear
- My needle was too dull or plugged
- I was with my sex partner
- I wanted to show trust/bonding
- My stuff got mixed up with someone else's
- Too high to care at the time
- Did not care/"why not?"
- I won't get HIV or other diseases
- Other-> Specify: _____
- No Answer
- Don't know

11 In the past 6 months, did other people use a needle or other gear that you had already used

- Yes **What parts?**
 - Needle / Syringe
 - Cotton / filter
 - Spoon
 - Water
- No *[prompt: How can you be sure?] If no, skip to question 12*
- Unsure/don't know

11.1 In the past 6 months, who has used your needles/gear? [can name more than one]

- Sex partner
- Friend
- Inmate
- Parents, Siblings
- Uncle, Aunt, Cousins
- Stranger
- Other -> Specify: _____

12. How many new (unused) needles do you need in a month? _____

12.1 Can you always get as many clean new needles as you need?

- Yes
- No

12.2 Do you know where you can get free condoms from?

- Yes
- No

12.3 In the last 12 months, have you used any of the needle exchange sites in Saskatoon?

- Yes
- No

12.4 If you did not always use needle exchange services in the last 12 months, or you used the services less often than you needed clean needles, why was this?

- Location of sites
- I'm not right there when I need it
- Not open/available when I need it
- People I know will see me
- Don't want to get caught (e.g. cops)
- Out of my way/hassle to get there
- No longer using
- Didn't know about them
- Get hassled carrying (used) needles
- Other (Specify:)

13 Have you ever been in jail?

- Yes *prompt for when/where* _____
- No -> **END HERE, thank you**

13.1 While you were inside, did you ever use a needle or other implement to inject yourself?

- No
- Unsure/don't remember
- Yes

Patient information:	Interviewer	Date completed
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Appendix D

Part I and II of Final Questionnaire

 Public Health Services	HIV Cluster Network Questionnaire
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In this interview, I will be asking you questions about yourself and your lifestyle, which include questions about injection drug use and sexual behaviour. Anything you tell me during this interview will be kept confidential. Some of the questions ask about personal and sensitive issues, so I want to remind you that you do not have to answer any question that you do not want to. At the end of the interview, you will be given \$20 for your participation.

A. Participant Identifier Code: <i>LI ## - BY</i>	Date: <i>YYYY / MM / DD</i>	B. Interviewer Initials:
---	-----------------------------	--------------------------

C. Where did the interviewer connect with the participant?

- Participant's home
- Friend's home
- Relative's home
- Dealer home
- Street
- Van
- Sexual Health Clinic
- Other _____

D. How will we find you to connect with you again?

D.1 Address (Postal Code only entered)	<input type="radio"/> No Fixed Address (NFA)	Name of Hotel:
Postal Code		
D. 2 City:		D. 3 Province:
Hangouts		Other residences?

- | | | |
|--|--|--|
| E. Gender
<input type="radio"/> Male
<input type="radio"/> Female
<input type="radio"/> Transgendered
<input type="radio"/> Unknown | F. Ethnicity
<input type="radio"/> White
<input type="radio"/> Métis
<input type="radio"/> Asian
<input type="radio"/> Hispanic | <input type="radio"/> First Nations, If yes is client treaty?
<input type="radio"/> Registered Indian (Treaty)
<input type="radio"/> Non- Registered Indian
<input type="radio"/> South Asian
<input type="radio"/> Black
<input type="radio"/> Middle Eastern
<input type="radio"/> Other |
|--|--|--|

G. Date of Birth *YYYY* / *MM* / *DD* (or year)

_____ / _____ / _____

I'm going to ask you some questions about sex. Sex includes anal, oral and vaginal sex.

- 1 How many sex partners have you had in the last 6 months? _____ #
- 1.1 The last time you had sexual intercourse, did you use a condom?
 Yes
 No
- H. Are your sex partners Men
 Women
 Both
- I. In the past 6 months how often have you used a condom with your regular sex partner (someone you have a relationship with)?
 Never Sometimes Always N/A
- 2 In the last 6 months have you worked in the sex trade (sex for money, gifts, drugs or a place to sleep)?
 Yes – How many times? _____ #
 No -> probe for recall
 Unsure / don't remember [probe for recall; reassure confidentiality]
 N/A if NA go to question 3
- J. If you have had sex for money, gifts, drugs or a place to sleep during the past 6 months, how often did you use a condom with your sex trade partner?
 Never Sometimes Always N/A
- 3 How many of your sex partner(s) in the last 6 months were HIV positive? (Includes regular, casual and sex trade partners)
 _____ #
 Unsure / don't know
 N/A

For women of reproductive age (15 to 45 years only) - men and the rest go to Question 5.

- 4 Are you taking or using any form of contraception or birth control?
 Yes
 No
 Unsure / don't know
- 4.1 Do you know where you can get any form of contraception or birth control?
 Yes
 No
 I do not need contraception
 Unsure / don't know

- K. The next question asks about types of drugs you may inject or smoke or otherwise take. Have you ever injected non-prescription drugs anywhere in your body?
 ○ Yes, If Yes go to **What drugs do (did) you inject?**
 ○ No, If No go to **L. Do you take Methadone?**

		Frequency (√)		
Description		Daily	Weekly	Monthly
K. What drugs do (did) you inject? Allow respondent to list; then prompt "what else?"	<input type="checkbox"/> cocaine (K1)			
	<input type="checkbox"/> crystal meth (K2)			
	<input type="checkbox"/> heroin (K3)			
	<input type="checkbox"/> Talwin / Ritalin (K4)			
	<input type="checkbox"/> Morphine (K5)			
	<input type="checkbox"/> Dilaudid (K6)			
	<input type="checkbox"/> other (K7) _____			
How often?				
L. Do you take Methadone? ○ Yes ○ No How often?	<input type="checkbox"/> street (L1)			
	<input type="checkbox"/> prescription (L2)			
M. Do you smoke drugs? ○ Yes ○ No What drugs do you smoke? How often?	<input type="checkbox"/> crack (M1)			
	<input type="checkbox"/> cocaine (M2)			
	<input type="checkbox"/> crystal meth (M3)			
	<input type="checkbox"/> heroin (M4)			
	<input type="checkbox"/> pot/hash (M5)			
	<input type="checkbox"/> Cigarettes (M6)			
	<input type="checkbox"/> other (M7) _____			
N. Do you drink alcohol ○ Yes ○ No How often?	<input type="checkbox"/> Home brewed (N1)			
	<input type="checkbox"/> Store bought (N2)			

- O. I'm going to ask you a few questions about when you first started injecting drugs. How old were you when you started to inject drugs?
 Age _____
 ○ Don't know

- P. Who were you with the first time you injected?
 ○ Parent
 ○ Sibling
 ○ Other relative
 ○ Sex Partner
 ○ Friend
 ○ Stranger
 ○ Other

- Q. Where were you when you first shot up? (don't prompt, except for name of park, bar, washroom, hotel)
- Own home
 - Relative's home
 - Friend's place
 - In a park _____(name) (Q1)
 - In a bar/restaurant _____(name) (Q2)
 - In a public washroom _____(name) (Q3)
 - In the street (alley, doorway, etc.) _____(name) (Q4)
 - Car/vehicle
 - Shooting gallery hotel/motel (Q5) _____(name)(Q6)
 - Prison/jail _____(name) (Q7)
 - Other: _____
 - Don't remember
- 6 When you last injected / shot up, did more than one person draw up their hit from the same cooker?
- Yes
 - No
 - Don't know
- 6.1 Do you think that there are any risks when more than one person draws up their hit from the same cooker?
- Yes
 - No
 - Don't know
- 7 When you injected (during the last 6 months), were you usually:
- Alone
 - With your sex partner
 - With other users
- How many other users did you *usually* shoot up with? _____
- 8 When you last injected / shot up, where did you obtain the syringe / needle from?
- Clean / new needle from a needle exchange program or other source of new needles
 - I reused a needle I already had
 - Borrowed a needle from friends or relatives
 - Borrowed a needles from a stranger
 - Don't know
- 9 Where do you **usually** inject/shoot up (during the last 6 months)?
- Own home
 - Friend's place
 - In a park _____(name) (R1)
 - In a bar/restaurant _____(name) (R2)
 - In a public washroom _____(name) (R3)
 - In the street (alley, doorway, etc.) _____(name) (R4)
 - Car/vehicle
 - Shooting gallery hotel/motel (R5) _____(name)(R6)
 - Prison/jail _____(name) (R7)
 - Other: _____
 - Don't remember

10 In your life, have you ever used a needle/gear that someone else had already used?

[Prompt that this includes sex partners/friends/family]

- Yes What part(s)?
 - Needle / Syringe
 - Cotton / Filter
 - Water
 - Spoon (cooker)
- No *Skip to Question # 11*

10.1 In your lifetime, whose needles/gear did you ever use?

- Sex partner
- Friend
- Parents or siblings
- Uncle, Aunts, cousins
- Dealer
- Inmate
- Stranger
- Other (specify :) _____

10.2 When you used a needle/gear that someone else had already used, what are some of the reasons why: *[don't read the list, prompt if necessary]*

- Did not have one "on me"
- Didn't know where to get new ones
- Couldn't get a new one when I needed it
- I sold all my needles/gear
- My needle was too dull or plugged
- I was with my sex partner
- I wanted to show trust/bonding
- My stuff got mixed up with someone else's
- Too high to care at the time
- Did not care/"why not?"
- I won't get HIV or other diseases
- Other-> Specify: _____
- No Answer
- Don't know

11 In the past 6 months, did other people use a needle or other gear that you had already used?

- Yes What parts?
 - Needle / Syringe
 - Cotton / filter
 - Spoon
 - Water
- No *[prompt: How can you be sure?] If no, skip to question 12*
- Unsure/don't know

11.1 **In the past 6 months, who has used your needles/gear? *[Can name more than one]***

- Sex partner
- Friend
- Inmate
- Parents, Siblings
- Uncle, Aunt, Cousins
- Stranger
- Other -> Specify: _____

12. How many new (unused) needles do you need in a month? _____
- 12.1 Can you always get as many clean new needles as you need?
 Yes No
- S. Where **have you** got clean needles from in the past year?
 Street Health Van
 Sexual Health Clinic
 Riversdale Clinic
 Buy from a drugstore
 Buy from a friend/family
 Borrow / obtain from a friend/family
 Other _____
- 12.2 Do you know where you can get free condoms from?
 Yes No
- T Where **have you** got free condoms from in the past year?
 Street Health Van
 Sexual Health Clinic
 Riversdale Clinic
 Buy from a drugstore
 Buy from a friend/family
 Borrow / obtain from a friend/family
 Other _____
- 12.3 In the last 12 months, have you used any of the needle exchange sites in Saskatoon?
 Yes No
 If yes, which sites?
- TT If you use needle exchange services, which ones?
 Street Health Van
 Sexual Health Clinic
 Riversdale Clinic
 Westside Clinic
 Other _____
- 12.4 If you did not always use needle exchange services in the last 12 months, or you used the services less often than you needed clean needles, why was this? (Wait for response, then prompt "why else?")
 Location of sites
 I'm not right there when I need it
 Not open/available when I need it
 People I know will see me
 Don't want to get caught (e.g. cops)
 Out of my way/hassle to get there
 No longer using
 Didn't know about them
 Get hassled carrying (used) needles
 Other (Specify :) _____
 N/A

Lab results					
	Status		Date Sent to Lab	Date Result rec'd	Follow-up date
HIV	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Detuned	<input type="checkbox"/> Recent	<input type="checkbox"/> Established	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Drug Resistance	<input type="checkbox"/> Wild Type		YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
	<input type="checkbox"/> NRTI				
	<input type="checkbox"/> NNRTI				
	<input type="checkbox"/> PI				
	<input type="checkbox"/> MDR				
Chlamydia	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Gonorrhoea	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Hep Bs Ag	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Anti HBs	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Hep C	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD
Hep A status	<input type="checkbox"/> Immune	<input type="checkbox"/> Non Immune	<i>Processed automatically if HCV +</i>	YYYY / MM / DD	YYYY / MM / DD
Syphilis	<input type="checkbox"/> Positive	<input type="checkbox"/> Negative	YYYY / MM / DD	YYYY / MM / DD	YYYY / MM / DD

Sample Number For Phylogenetic analysis:	
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Appendix E

Anecdotal Field Experiences Reports



**Public Health
Services**

**HIV Social Network Analysis
Pamela de Bruin**

Harm Reduction is often defined as meeting clients “where they are at”. My experiences in February 2006 in investigating the social networks of injection drug users who are known HIV cases and their contacts has epitomized this quote. I have had the most unique opportunities to connect with this high-risk population and the largest success has come from proactive, intensive work with clients in their community.

I started locating cases and contacts at addresses I was familiar with from the first round of surveys in fall 2005. From there, I expanded locating other cases and their IDU, sexual or social contacts through re-interviewing. The population in this network tends to move a lot, do not have phones or do not have a stable addresses. Therefore, it is necessary to find clients by asking those with whom they have relationships.

I particularly enjoyed used the Health Works van as a base of operations as I felt safe and had easy access to resources and equipment. The homes of the persons interviewed were often in disrepair and the risk of a needle poke injury was real. Working in the van provided a smoke-free environment with no risk of loose needles. The tools required for education and testing are available with the ability to exchange needles, provide condoms and immunize as well. The persons interviewed in the network were familiar with the van and did not voice an opposition to coming to the van for services. A couple of clients were concerned about having the van parked in front of their home, however did not feel the need to have the van moved when offered.

Surveillance activities performed during daytime hours proved to be very successful. Fifty-eight (58) clients were seen in the 21 working days dedicated to the survey. Clients were met at their homes or happened upon by chance at other homes. The vast majority of clients were comfortable spending time with us to have testing and education done and did not display a hurried attitude to leaving, as I have previously seen in the van in the evening or at clinic during needle exchange. I believe I have achieved a true rapport with many clients in a very short period of time. Many clients were linked by close familial ties and seeing more than one client at a particular address provided an opportunity for testing that does not present itself at a fixed site.

On one of the last days of the survey, I bought muffins and passed them out to the people who were key in helping me find additional persons in the network. I believe this action can go a long way in building relationships. Poverty and inadequate nutrition can be huge hurdles to overcome. By providing nutrition, clients may have the inclination to connect with us and spend time with us. On the same note, the provision of money during the survey

was certainly key in connecting with some clients. I believe I would not have been given the opportunity to speak with some clients if it were not for the cash incentive.

The opportunity to exchange needles during daytime hours was convenient to this population. One survey question around the availability of new needles disturbed me, particularly as a vast majority of clients cited purchasing their needles from Shopper's Drug Mart on 22nd Street.

In the past weeks I have spent in the community, I have had numerous opportunities to re-connect with clients and re-visit issues with them. These opportunities are essential to helping clients recall and reinforce key messages around transmission, safe injection drug use, safer sex, vein maintenance, health appointments and rapport building to entice new clients to trust our services.

Recommendations:

- Continued intensive efforts applied to HIV surveillance during daytime hours, as community visits. I truly believe this must be scheduled nursing time to reduce the barriers of the PHN in locating another PHN to work with.
- One FTE dedicated to HIV surveillance only.
- Fixed needle exchange site in the vicinity of 22nd Street West and Avenue R South.
- Need to discuss with the Medical Health Officer, the Infectious Disease Consultant and the HIV surveillance PHNs the extent of PHS role in providing transportation to HIV positive clients for Infectious Diseases appointments related to the high rate of no shows.
- At fixed needle exchange in the core area, would advocate for an Infectious Diseases Consultant 2 half days per week or whatever we need.
- HIV surveillance team needs the ability to fast track persons interested in methadone or detox.
- HIV surveillance is not an isolated activity. All HIV cases are IDU, HCV positive, have immunization needs and require testing for other STIs. My experience working with the Disease Control PHN was invaluable in targeting the hepatitis C and immunization needs of the individual clients we were seeing.
- Need the ability to refer clients to support systems while awaiting diagnosis or after receiving positive HIV diagnosis.
- We need to continue with a more comprehensive data collection tool than the CRF. Suggest taking core questions from this survey and continue with them long term on all new HIV cases.
- Provide a non-perishable food item during client interactions.
- Consider a long-term incentive for clients who are hard to reach. An incentive for all HIV cases and contacts might prove to be worth our while!

Anecdotal Reflections re: The HIV questionnaire**Kathy Taylor
March 13, 2006**

The clients in the Saskatoon Correctional Centre (SCC) clearly have some unique issues. One HIV-positive client stated that he had seen a needle being shared in a state of dullness and overuse that he had never seen before. At present, there are no needle exchange services available at SCC. This same individual recalled attending an event at which he was pointed out to a group of inmates as being HIV positive. Clients seen in follow up to newly diagnosed HCV infection rarely take pamphlets when offered, as such printed material is seen as jeopardizing their confidentiality. Indeed, one inmate stated that “everyone knows why the Public Health Nurse wants to see you”.

During the process of conducting questionnaires, several clients were notified of being contacts to HIV. Inmates are in the unique position of lacking a social support system when receiving this information. Many were shocked and angered, and most wanted to know how Public Health had become aware of their status. Concerns regarding confidentiality were widespread. Clients were unwilling or unable to accept that their IDU practices had put them at risk for HIV infection. Pre-test counselling was, at times, carried out over a number of visits so that a rapport could be established between the Public Health Nurse and the inmate. Clients were more receptive to testing in this scenario when they understood that their results would not be released to the Correctional Centre without their knowledge and consent.

A client in the community, who was an HIV contact, also expressed that he would be unable to live with an HIV-positive diagnosis. This man is in a very high-risk situation as his sexual/IDU partner of six years is HIV positive and they have engaged in unsafe sex and needle sharing. While he was willing to participate in the survey and receive his honorarium, he refused testing. This client expressed suicidal thoughts, and subsequently testing was deferred until counselling/supports could be put in place. The client was referred to the 24-hour Crisis Line for immediate intervention as no other services were available at that time. He too expressed concern regarding his confidentiality, as he and his partner had many acquaintances in common. He felt that if his partner disclosed her status, the community would assume his diagnosis as well. In addition, he cited general misinformation circulated within the First Nations community regarding HIV transmission as an explanation for his reluctance to be tested. He feared ostracization from his family, as well as his community.

Two newly HIV-positive clients (mother and daughter) expressed a desire to start on Methadone. They have been on the waiting list “for a long time”. When the addictions counsellor was contacted, she confirmed that these two clients had been scheduled for an initial assessment; however, they had not responded to phone calls, and thus their appointments had been postponed. Many of the Street Health clients do not have phones and require labour-intensive methods of communication such as home visits. It would be beneficial to have a “fast track” in place for those clients expressing a desire to access

Addictions Services, Methadone treatment and/or Mental Health Services in a timely manner. Due to the difficulties that they face in their daily lives, clients often do not prioritize their HIV diagnoses as important matters that must be addressed.

The clients seen in their homes live in extreme poverty. One interview was conducted with the Public Health Nurse sitting on the floor, as the clients had no furniture in their apartment. The couple stated that their worker at DCRE was not helpful, and was working “against us”. The male was particularly forthcoming with information and showed the Public Health Nurse his drug paraphernalia. He and his partner were connected to needle exchange services. The Public Health Nurse and outreach worker have since connected with him through the van and have arranged a meeting to address some of his health and social concerns. Indeed, it is impossible to isolate HIV concerns from other social issues, such as inadequate housing, hunger, violence, dysfunctional relationships, unemployment, and addiction (to name a few).

Anecdotal Report
Kathy Gullen – Field Investigator (PHN)

At the request of the organization, I submit the following thoughts and observations experienced during my brief time assisting with surveys via the Health Works Van. It is not an exhaustive list, and lots of these thoughts are not novel ideas, but are to be accepted as thoughts and observations only.

- SHR HIV cases up by 247%
- Approximately 33% will have co-infection with HCV(probably higher)
- New cases being diagnosed in the < 25 year old age range
- 93% have been in jail
- Females having 19 sexual partners in the last 6 months
- >70% of HCV infections are related to IDU
- 50,000 Canadians have known infection with HIV/AIDS and 30% more that don't know they are infected

As a healthcare professional that has worked in the Communicable Disease Control and Sexual Health programs, I find these stats alarming, disturbing and challenging.

As a healthcare professional, I have also been part of many conversations that have questioned why are these clients non-compliant with our offers of “help”: referrals, immunizations, testing, contact tracing, follow-up appointments, medications, addiction programs.....

In the last 1.5 years I have had the opportunity to visit a few of the homes of some of the Saskatoon folks that have been lumped into the statistical group mentioned above. For me as a healthcare professional, these experiences have given me much food for thought about our present approaches to improving the stats as stated above. It has put a face and a name to these stats. It has humanized/personified them for me. It has given me the impetus to care whether the stats change or not. I must confess that meeting these people has made me realize what an overwhelming task changing these statistics will be, but I would encourage all care providers and policy makers to take this same opportunity.

It is difficult to put into words what I saw/felt during some of these visits so have chosen to list in point form some of my observations, thoughts and snippets of conversations that I have had. They are by no means an exhaustive list and by no means characteristic of all of the individuals that I met. These are not intended to be generalizations or judgements, but were some observations only that perhaps will spawn possibilities for programming or approaches.

- Transient population – difficult to find
- Have their own communication network amongst themselves
- Appointments difficult to keep

- Addictions programming sends them back to an environment that is not supportive of recovery
- Lack of mentors, family and otherwise
- Major poverty issues
- Poor self esteem
- No phones, therefore difficult to reach or for them to make contacts when needed
- No family doctors, use drop-in or ER
- Limited intellectual resources
- Want help, but don't seem to be able to coordinate it amongst the rest of their life issues
- Transportation issues
- Often surprised at diagnosis, in spite of their high risk activities
- Lack of education
- See HCV as a norm in their population
- Consistent drug addiction issues
- Fragmented medical care
- Mental health issues, like depression, not being addressed
- Impulsive life management
- Constant state of crisis management
- Perpetuation of cycle (e.g., kids growing up in an environment that teaches "the life" by example)
- Very hurting spiritually/emotionally
- Lack of trust
- Intimidated by the medical system - having to navigate the Royal University Hospital system for a referral to Infectious Diseases or any other specialist is very intimidating – taking them to the appointments seemed to help
- Hurt by those that they have trusted
- Difficulty with follow through, but sometimes seemed to do so when constantly reminded or supported
- Resilient – have survived lives /situations that are unbelievable
- Strong
- Receptive to positive feedback
- Law involved
- Sense of not deserving of good things
- Gang involvement
- Want a life free of addiction
- Many have children who are not with them and very hurt by this
- Isolation
- Need to be treated in a holistic approach
- Need to be respected
- Lack of emotional support
- Fearful
- Very controlled by their addictions
- Abusive relationships and no way to leave them
- Betrayed by people they trust
- Lack of positive role models/mentors/friends
- Problems so multiple that they don't know where to begin

- Difficulty problem solving
- Respond to one-on-one
- Survivors
- Many hurdles and getting coordinated services is one of them
- Challenged parenting practices but do truly care about their kids
- Respond to financial incentives
- Hungry
- Involved in very fragmented service provision
- Issues are overwhelming to care providers, “Where do we begin?”

Some thoughts on potential programming:

- Comprehensive/multi-discipline approach at appointments – disciplines such as Mental Health, Addictions, Public Health Nursing, Infectious Diseases, Nutrition, Justice, education, DCRE, leisure services, art and music therapies, methadone, financial management, mentor such as an elder...A ”Mayo-clinic” type of approach
- Outreach workers that can get them to appointments
- Coordination with transit/DCRE to have bus passes
- Coordination with Sask Tel/DCRE to have telephones as a basic service
- An addictions center that has all of the comprehensive/coordinated services listed above, but a longer program: 1 year that transitions them back to society and supports them after they leave so they are not going back to influences that supported addictions in the first place
- Outreach workers that connect with them in their community (like we were doing during the study – it allowed the nurses to address issues on their turf, like immunization of themselves and their children, teaching one-on-one, etc.)
- Outreach workers that can go with them to their appointments
- Volunteers that could help getting to appointments
- Mobile clinics that go to their neighbourhood
- Referrals to SWITCH or a similar comprehensive service
- Using West Winds, or a similar concept, to develop a comprehensive service for clients with HIV/HCV
- Coordinating Communicable Disease Control and Sexual Health PHNs to work together
- Provide financial incentives or food incentives for attending services
- Allowing 2nd and 3rd... chances for ID appointments, addiction services, etc. and addressing the issues that cause the barriers
- Streamlining access to care “one-stop-shop” concept