

**Report of the  
National Needle Exchange  
Blood-borne Virus  
Seroprevalence Survey**

**BBVNEX 2004**



# Index

	Page Number
Executive summary	1
Background to the study	3
Prevalence of blood-borne virus infections among NZ IDU	3
The two previous national seroprevalence surveys	4
1997 serosurvey	4
1998 serosurvey	4
2004 National Needle Exchange Seroprevalence Survey	6
Project team	6
Methods	6
Response rates	7
Results	8
Respondent demographics	8
Seroprevalence results	9
HIV	9
HCV	9
HBV	9
History of previous testing for HIV HCV and HBV	10
HIV	11
HCV	11
HBV	11
Self-reported vs measured serostatus	11
Drug use behaviours	12
Age at first injecting	13
Frequency of injecting	13
Drugs injected	13
Places where respondents injected drugs	14
Use of new needles and syringes	14
Reuse of needles and syringes	15
Sharing of other injecting equipment	15
Sources and frequency of obtaining needles & syringes	17
Drug treatment	17
Sexual orientation and behaviours	18
Other risk factors for blood-borne virus infections	20



## Executive summary

Injecting drug users (IDU) are a population at high risk from blood borne virus infections, particularly human immunodeficiency virus (HIV) hepatitis B virus (HBV) and hepatitis C virus (HCV). New Zealand's Needle Exchange Programme (NEP) outlets have taken part in two previous cross sectional surveys of risk behaviours and prevalence of blood-borne viral infections among injecting drug users. These surveys were conducted in 1997 and 1998 and both found a low prevalence of HIV (<1%) and a high prevalence of HCV (53% in 1997 and 45% in 1998). Prevalence estimates of immunity to HBV in these surveys were based on self report.

The two previous NEP serosurveys provided baseline data against which the contemporary demographic characteristics, injecting and sexual behaviours and seroprevalence of HCV HBV and HIV in IDU clients of needle exchanges could be compared. Tracking the prevalence of risk behaviors and the prevalence of blood-borne virus infection among IDU is necessary to provide policy and planning direction, and to assess the extent to which harm reduction strategies have been successful.

During a two week period in November 2004, IDU clients attending needle exchanges in selected sites were invited to complete an anonymous questionnaire, and provide finger-prick blood samples. The nine sites involved in this survey included the four previously involved in 1997 and 1998 (Auckland, Wellington, Nelson and Christchurch), as well as needle exchanges in Hamilton, Mount Maunganui, Palmerston North, Timaru and Dunedin. Four hundred and twelve people completed questionnaires during the two-week study period. Two hundred and sixty (63.4%) were male, 148 (36.1%) female, and 2 (0.5%) transgender. The median age of respondents was 36. Almost 14% of the sample identified as Maori and 2% as Pacific. Approximately 10% of respondents identified themselves as bisexual and 2.9% as homosexual.

Completed questionnaires and matching blood samples were obtained for 403 people. Four respondents tested positive for HIV (1%) though only one was positive on confirmatory testing (0.3%). Almost two thirds (61%) of respondents tested were not immune to HBV, 17% were immune from vaccination, and 14% as a result of past infection. Eight percent of respondents had had contact with HBV in the past, but no detectable levels of immunity. None were HBV carriers. The prevalence of HCV was high (70%) and strongly associated with age and duration of injecting. Higher rates of HCV were found in males and those who had been on a methadone programme. No association was found between HCV status and ethnicity or recent injecting behaviours. Eighty-eight percent of respondents had been previously tested for HIV, and 91% for HCV and 65% for HBV.

Respondents' average duration of injecting history was 15.8 years, and their frequency of injecting was variable, though almost half injected daily or more often. The drugs most frequently injected by respondents were methadone, morphine, Ritalin® and amphetamines and they most often injected in their own or in friends' homes. The vast majority of respondents (94.5%) obtained their new needles and syringes from a needle exchange in the last month and only 37.5% had obtained them from a pharmacy. Just over half of the respondents were currently on a methadone programme, with an additional 14.6% having been on one previously.

Half of the respondents reported using a new needle and syringe every time they injected drugs and another 40% reported doing so most of the time. Sharing of other equipment such as spoons and tourniquets was reported by 40% of respondents. Most respondents (83.1%) had not been injected by someone else after that person had injected themselves, and relatively few (15.5%) had reused someone else's needle or syringe at some time in the previous month. Similarly, 85% of respondents had not let someone else reuse their needle and syringe in the previous month, and those who did so mostly shared with their regular sex partner or a close friend.

