Evidence to Support Standards for Blood Borne Pathogen Prevention Services in Nova Scotia

May 2004

Standard statements for blood borne pathogen prevention services were developed based on evidence. The following tables provide a synopsis of evidence collected in support of each statement. In some cases, the evidence supports the standard itself while in others it supports the inclusion of the elements identified within the standard. Each has been categorized according to the level of rigour. Please refer to Appendix A for the level of evidence scale. Please note that the evidence presented is not an exhaustive list.

General Standards

Standard Statements	Evidence	Level of Evidence
1. Governance Each District Health Authority has an identified mechanism for planning, resource allocation and accountability for the full range of prevention of blood borne pathogens services.	**1.**Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers).	**IV**
2. Standards Development Process All District Health Authorities, the Department of Health, community-based organizations and stakeholders participate in the ongoing review and revision of general and service-specific standards.	**2.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers).	**IV**
3. Access 3.1. District Health Authorities ensure all Nova Scotians, especially those at risk, have reasonable access to blood borne pathogens prevention services through a variety of mechanisms including direct service delivery, contracting out or partnerships/service agreements among or between districts or with	**3.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. According to the TOPS study, clinic accessibility is related to retention (Condelli & Joe et al., as cited in Ward et al, 1998b, 325). **3.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Factors that impede accessibility, such as treatment fees, have been found to have an adverse effect on retention (Maddux, as cited in National Institute on Drug Abuse, 1995, 1-50). **3.2** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Recent research reviewed by Ward et al. (1998b, 331) indicates that some of the	**I** **I** **I**

relevant service delivery partners. 3.2. Services are implemented in ways that reduce barriers to access and take into consideration where relevant: 3.2.1. Client-centered policies (responsive to individual and community needs) 3.2.2. Accessible location 3.2.3. Safe and supportive environment 3.2.4. Office or outreach hours appropriate to the community 3.2.5. Affordability of travel to service site 3.2.6. Availability of practical support (e.g. child care) 3.2.7. Integration with other services that are focused on populations at increased risk of blood borne pathogen infections (e.g. sexually transmitted infection clinics) 3.3. Information on the range of blood borne pathogen prevention services, and how to access both local and non-local services is communicated through a variety of means to all Nova Scotians, especially those at risk.	program factors that are most likely to improve retention include accessibility, affordability and convenient hours of operation. **3.2** Strike, C.J., Challacombe, L., Myers, T., Millson, M., *Needle Exchange Programs Delivery and Access Issues*. Literature suggests attracting and retaining clients, encouraging behavior change and reducing spread of blood borne pathogens, services need to address client needs in terms of location, time and space. Workers and others report effectiveness in reducing blood borne pathogen is dependent in part on ability to provide accessible and comprehensive services. **3.2**Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Gaps identified – availability in rural areas and out suburbs, at night and on weekends. All jurisdictions need to identify ways to improve access to needles and syringes outside "office hours" and outside small zones where equipment is easily accessible. **3.2 and 3.2.4** Canadian HIV/AIDS Legal Network, *Injection Drug Use and HIV/AIDS 2002/2003 Needle Exchange Programs* Issues identified: Needle exchanges often in large cities. Rural access is limited. Hours of operation are often restricted. **3.2** Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. Available at URL: www.medscape.com/viewarticle/410302. Collaboration to create user friendly needle exchange services including consideration of local conditions such as transportation as well as convenient hours and locations. **3.2** Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. Needle exchange location can have an impact on effectiveness. "Fear of identification as an IDU and/or harassment by the police can prevent IDUs from attending an NEP." (Original article: Rich, J.D., et al, *Obstacles to Needle Exchange Participation in Rhode Island*, Journal of Acquired Immune Deficiency Syndrome Human Retrovirology, vol. 21, pp. 396-400, 1999.	**I** **III** **III** **I** **I**

	3.2.4 Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs,* AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. Can encourage frequent use with longer operating hours and more days of operation. **3.2.2&3.2.4**UNAIDS, *Voluntary Counselling and Testing,* UNAIDS, youandaids, The HIV Portal for Asia Pacific, 2003, Dec. Available from url: www.youandaids.org/Themes/voluntarycounseling.asp. The location and opening hours of the service should reflect the needs of the particular community. **3.2.5** Borisova, N.N., Goodman, A.C. *The Effects of Time and Money Prices on Treatment Attendance for Methadone Maintenance Clients*, Journal of Substance Abuse Treatment, Vol. 26, pp. 345-352, 2004. Economic barriers to methadone maintenance treatment (daily attendance to clinic) – using Willingness to Pay measure, negative effect of time price on treatment attendance. (Treatment time and travel time are costs to the client that may create barrier – may talk about time costs with client and balance with benefits of participation. Convenient locations and shorter waiting lists to reduce time costs)	**I** **II** **I**
4. Planning, Monitoring and Evaluation 4.1. Planning, design, implementation, monitoring and evaluation activities for blood borne pathogen prevention services includes a range of stakeholders including people who will be impacted by the activities. 4.2. District Health Authorities provide ongoing assessment of their communities as the basis for identifying appropriate mechanisms for implementing services. Assessment includes: 4.2.1. Identification of current services available (example: Public Health Services, Addiction Services,	**4.1**Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Issue identified – level of involvement of people who use injection drugs in service delivery, planning and evaluation must be increased. **4.1**UNAIDS, *Voluntary Counselling and Testing,* UNAIDS, youandaids, The HIV Portal for Asia Pacific, 2003, Dec. Available from URL: www.youandaids.org/Themes/voluntarycounseling.asp. Referral system for comprehensive HIV prevention, care and support should be developed in consultation with community-based organizations, NGOs and other service managers as well as networks of people living with HIV/AIDS. **4.1 and 4.2** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Available from URL: www.hc-sc.gc.ca/pphb-dgspsp/publicat/cgshe-ldnemss/index.html. Effective sexual health education programs are based on a broad assessment of individual and community needs. This process involves collaboration with persons for whom the programs are intended.	**III** **II** **II**

community-based hepatitis and HIV/AIDS organizations, financial supports, housing) 4.2.2. Measure of community knowledge, attitudes and behaviour regarding for example, blood borne pathogens, harm reduction, needle exchange, injection drug use, addictions treatment 4.2.3. Estimate of the numbers of individuals who may directly benefit from the service (example: number of people who use needles and number of people seeking treatment for addictions) 4.2.4. Identification of cost-effective strategies to deliver the service 4.2.5. Assessment of needs of specific high risk populations 4.3. Models of service delivery vary based on the results of community assessments. 4.4. Services provided to people most at risk are provided through a flexible community-based approach. 4.5. District Health Authorities and community-based organizations concerned with prevention of blood	**4.2** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Content, delivery and methodology emerge from assessment of community needs supported by up-to-date research that draws on input from community members, educators, and researchers in a variety of disciplines. **4.2** Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. Available at URL www.medscape.com/viewarticle/410302 Needle exchange may not be appropriate for every community; it is helpful to identify those areas where needle exchanges are needed and gain local community support. **4.5** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Effective sexual health education programs are evaluated on a regular basis. **4.5.2** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. To monitor needle exchange programs, they should maintain a count of the number of needles given out, the number returned and the number inappropriately discarded in the community.	**II** **I** **II** **II**

borne pathogen infections have input into the development and implementation of a provincial evaluation framework for blood borne pathogen prevention services. The evaluation framework includes: 4.5.1. Annual monitoring of compliance with established blood borne pathogens prevention standards 4.5.2. Process evaluation measures 4.5.3. Outcome evaluation measures 4.5.4. Feedback and revision process		
5. <u>Health Human Resources</u> 5.1. District Health Authorities, community-based organizations and the Department of Health participate in the development of a provincial health human resource strategy that: 5.1.1. Identifies core competencies for staff involved in each service 5.1.2. Explores opportunities for training that would benefit from a consistent province-wide approach 5.2. All staff engaged in blood borne pathogen prevention services demonstrate knowledge, skills and competencies appropriate to the service provided and consistent with	**5.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. "According to Kreek (1991), adequate staff numbers, training, and concern for patient needs and high staff stability (low staff turnover) are associated with improved patient outcomes" (Centre for Substance Abuse Treatment, as cited in National Institute on Drug Abuse, 1995, 1-39). **5.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. High staff morale is associated with better treatment outcomes (Lowinson et al., 1997, 412). **5.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. According to recent research reviewed by Ward et al. (1998b, 331), program staff with positive attitudes to methadone treatment and to clients/patients is a factor that makes retention more likely.	**I** **I** **I**

the evidence. 5.3. Training resources, which may be pooled among districts or at the provincial level, are allocated to reflect emerging priorities related to preventing or reducing the harms related to blood borne pathogen infections.		

Health Education and Social Marketing Standards

Standard Statements	Evidence	Level of Evidence
1. District Health Authorities and community-based organizations concerned with prevention of blood borne pathogen infections have input into the development and implementation of a provincial social marketing campaign that: 1.1. Dispels myths about transmission of blood borne pathogens 1.2. Increases awareness of risk behaviors associated with blood borne pathogen infections including tattooing and piercing, injection and other drug use and unsafe sexual practices 1.3. Reduces marginalization/ stigmatization and discrimination of vulnerable populations or those perceived to be at higher risk of blood borne pathogens 1.4. Increases acceptance of/receptivity to interventions and services (particularly harm reduction) that reduce incidence of blood borne pathogens 1.5. Increases advocacy for interventions and services	**1.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **1.**Health Canada, *Social marketing: New Weapon in our Old Struggle* (website last updated: 2003-07-11). Available from URL: http://www.hc-sc.gc.ca/english/socialmarketing/social_marketing/weapon.html. Suggests social marketing has a central role to play in public health programs. It can facilitate getting policies on the legislative agenda, reach desired target groups and mobilize public support. Social marketing is described as a potent element of a comprehensive health promotion program that is intended to reach, inform and influence people.	**IV** **I**

(particularly harm reduction) that reduce incidence of blood borne pathogens 1.6. Increases awareness of the importance of being tested for blood borne pathogens for people who have been at risk, and particularly for those at increased risk of infection		
2. Based on the best available evidence on successful interventions, social marketing services target the general population as well as high risk groups identified at the local and/or provincial levels.	**2.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **2.** Health Canada, *Hepatitis C – Prevention and Control: A Public Health Consensus*, Canada Communicable Disease Report, Vol. 25s2, 1999, June. Available from URL: http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/99vol25/25s2/index.html. The Education Working Group discussed basic educational and social marketing strategies in developing recommendations. The group stated that interventions must be targeted to groups at high risk as well as the public and to health care providers who may not be comfortable dealing with clients who inject drugs.	**IV** **II**
3. District Health Authorities provide a comprehensive range of sexual health services that address prevention of blood borne pathogens including, but not limited to: 3.1. Youth health centers (safe, nonjudgemental, accessible services for youth) 3.2. Gay, lesbian, bisexual, two-spirited, transgendered and intersexed health services 3.3. Easy and discrete access to male and female condoms and oral dams	**3.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **3.1** Nova Scotia Department of Health, *An Evaluation of Youth Health Centres in Nova Scotia, Phase III Report*, Report prepared by Collins Management Consulting & Research Ltd., 2003, June. The evaluation recommends that youth health centres should be available to all youth in the province. The evaluation refers to the need for a comprehensive set of services and supports that would be identified by the centre itself with youth guiding the decisions along the way. **3.1 and 3.2** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Available from URL: www.hc-sc.gc.ca/pphb-dgspsp/publicat/cgshe-ldnemss/index.html. Guidelines focusing on principle of accessibility: Gay,lesbian, bisexual and transgendered individuals, Aboriginal peoples and youth (others are listed) are among the groups that require	**IV** **III** **II**

free or at reduced cost 3.4. Educational resource materials that are culturally sensitive, with prevention messages based on evidence and/or best practice and developed according to Public Health "Procedures for development, procurement and management of consumer resources: audio-visual and educational/promotional aids and for professional resources for public health services".	improved access to sexual health education. The guideline addresses the sexual health education component of sexual health services. **3.4** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. "Evaluation research literature suggests that sexual health education programs that are community and culturally appropriate are more likely to be effective."	 **II**
4. Comprehensive, sustained prevention of blood borne pathogen infections health education is provided in various service settings including, but not limited to: 4.1. Adult and Youth Correctional facilities and release transition programs 4.2. Schools 4.3. Community-based services and/or outreach services to high risk populations 4.4. Women's facilities (shelters, prenatal clinics) 4.5. Social service agencies 4.6. Youth/teen health and wellness centers and clinics 4.7. Community health facilities 4.8. Services for people newly arrived to	**4.**Frank, J., and DiRuggiero, E. *Prevention: Delivering the Goods*, Longwoods Review, Vol. 1, No. 2, pp. 2-8, 2003. A key feature in the development and delivery of prevention programs is systematic delivery at multiple levels and settings (schools, recreation programs, community at large, home, etc). **4.**Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Available from URL: www.hc-sc.gc.ca/pphb-dgspsp/publicat/cgshe-ldnemss/index.html. Guidelines focusing on principle of accessibility: "access to effective sexual health education requires ongoing support in both formal settings such as schools, community groups, health and social service agencies and in informal settings where sexual health education is provided by parents, caregivers and others." **4.2** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Guidelines focusing on principle of accessibility: "Schools are one of the key organizations for providing sexuality education."	**II** **II** **II**

Canada		
5. Health education services are designed based on the best available evidence on successful interventions.	**5.**Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Content, delivery and methodology emerge from assessment of community needs supported by up-to-date research that draws on input from community members, educators, and researchers in a variety of disciplines.	**II**
6. Health education services are designed and implemented in ways that take into consideration characteristics of successful blood borne pathogen prevention services such as: 6.1. Based on behavioral and social science theory such as the Health Belief Model, AIDS Risk reduction model, and the Transtheoretical (Stages of Change) model 6.2. Clearly defined target groups, objectives and interventions 6.3. Assessment of community and individual needs 6.4. Accessibility to target population 6.5. Cultural appropriateness (messages tailored to audience in terms of age; race; colour; religion; creed; sex; sexual orientation; language; physical challenges or mental health problems) 6.6. Sufficient duration and intensity to achieve lasting behavior change	**6.**Colorado Department of Public Health and Environment, *Definitions for HIV Prevention Interventions and Standards of Practice*, Core Planning Group of Coloradans Working Together: Preventing HIV/AIDS, 2002, July. Provides a listing of characteristics of successful HIV prevention programs. **6.** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Available from URL: www.hc-sc.gc.ca/pphb-dgspsp/publicat/cgshe-ldnemss/index.html. Guidelines addressing the principle of effectiveness provide characteristics of sexual health education that are effective in increasing knowledge, personal insight, motivation and skills. **6.1** Leonard, L., Hotz, S., Hansen, J., Plotnikoff, R. *A Critical Comparative Examination of Three Theories of Health Behavior Change Applied to HIV Preventive Behavior* Study Monograph 1999. Research into HIV prevention behaviors becoming grounded in theory relevant to health behavior change. Transtheoretical Model, Health Belief Model and Theory of Reasoned Action tested for explanatory power re: condom use. TTM accounted for largest variance. Use of theory useful in planning, implementing and evaluating – tailor strategies to groups based on readiness to change behavior. **6.1** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Provides evidence supporting IMB (Information, Motivation and Behavioral Skills) model in health education. The model "has been used to guide effective interventions that take into account sexual and reproductive health behaviors as well as the needs of diverse populations. **6.1** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. One of the characteristics of nearly all effective interventions is the incorporation of theoretical models that will influence behavior change, either as a whole, or in its components. (Original reference: MacKay, A., Prevention of Sexually Transmitted Infections in Different Populations: A Review of Behaviorally Effective and Cost-effective Interventions, The Canadian Journal of Human Sexuality, Vol. 9,	**II** **II** **I** **II** **II**

	pp. 95-120, 2000.) **6.2** Centre for Disease Control and Prevention (CDC), *Compendium of HIV Prevention Interventions with Evidence of Effectiveness*, CDCs HIV/AIDS Prevention Research Synthesis Project, 1999, Nov (Revised August 31, 2001). Elements of successful interventions include having a clearly defined audience, and clearly defined goals and objectives. **6.3** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Effective sexual health education programs are based on a broad assessment of individual and community needs. This process involves collaboration with persons for whom the programs are intended. **6.3** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Content, delivery and methodology emerge from assessment of community needs supported by up-to-date research that draws on input from community members, educators, and researchers in a variety of disciplines. **6.5** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. "Effective sexual health education is culturally appropriate and should reflect different social situations." **6.6** Frank, J., and DiRuggiero, E. *Prevention: Delivering the Goods*, Longwoods Review, Vol. 1, No. 2, pp. 2-8, 2003. A key feature in the development and delivery of prevention programs is ensuring sufficient intensity and sustained over what may take years of cultural change before the desired behavior change becomes the norm.	**I** **II** **II** **II** **II**
7. Based on the best available evidence on successful interventions, health education services identify and target at-risk groups in their communities and design and deliver services to address their needs.	**7.** Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Available from URL: www.hc-sc.gc.ca/pphb-dgspsp/publicat/cgshe-ldnemss/index.html. "Evaluation research literature suggests that sexual health education programs that are community and culturally appropriate are more likely to be effective." Adapt education approaches to norms and social networks of the target audience.	**II**

	7.Health Canada, *Canadian Guidelines for Sexual Health Education*, Health Canada, Population and Public Health Branch, 2003. Guidelines focusing on principle of comprehensiveness: Comprehensiveness in effective sexual health education focuses on the needs of different groups and considers the various issues relevant to the sexual health of individuals within any group.	**II**
	7. Health Canada, *Hepatitis C – Prevention and Control: A Public Health Consensus*, Canada Communicable Disease Report, Vol. 25s2, 1999, June. Available from URL: http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/99vol25/25s2/index.html. The Education Working Group discussed basic educational and social marketing strategies in developing recommendations. The group stated that interventions must be targeted to groups at high risk as well as the public and to health care providers who may not be comfortable dealing with clients who inject drugs.	**II**

Other

Centre for Disease Control and Prevention (CDC), *Compendium of HIV Prevention Interventions with Evidence of Effectiveness*, CDCs HIV/AIDS Prevention Research Synthesis Project, 1999, Nov (Revised August 31, 2001). Provides a summary of evidence-based interventions that are effective in preventing HIV transmission. Also provides a tool for assessing existing interventions against the elements of successful programs.

Counselling, Testing and Referral Standards

Standard Statements	Evidence	Level of Evidence
1. District Health Authorities provide or facilitate access to counselling, testing and referral services for blood borne pathogens including: • nominal hepatitis B and hepatitis C testing • nominal, non-nominal and anonymous HIV testing	**1.**Reporting Requirements for HIV Positive Persons Regulations made under Section 12 of the *Health Act*, R.S.N.S. 1989, c.195, O.I.C. 2000-101 (March 8, 2000), N.S. Reg. 31/2000. Legislated options with respect to parameters of anonymous HIV testing.	**Legislation**
	1.World Health Organization, *Testing and Counselling*. Available at url: www.who.int/hiv/topics/vct/testing/en. Serostatus knowledge is key entry point to prevention services in populations at risk and to care and support for those infected with HIV.	**II**
	1.Provincial Anonymous Testing Steering Committee, *Background Document in Support of Expanded Access to Anonymous HIV Testing Services in Nova Scotia*, 2001, Dec. In 1999 the N.S. Anonymous testing site started concurrent hepatitis B and C testing; available to HIV testing clients on request.	**III**
	1.Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, *Revised Guidelines for HIV Counseling, Testing and Referral*, Recommendations and Reports, vol. 50(RR19), pp. 1-58, 2001, Nov. Early knowledge of HIV infection is now recognized as a critical component in controlling the spread of HIV infection. (Original reference: Valdiserri, et al, Promoting Early HIV Diagnosis and Entry into Care, AIDS, Vol. 13, pp. 2317-30, 1999.)	**II**
	1.Pyra, K. and Heath, S., *Evaluation of the Anonymous HIV Testing Program*, Planned Parenthood Metro Clinic, 2003, Nov. Most clients accessing the anonymous testing site are from the Halifax Regional Municipality (HRM); the only site is located in Halifax. Suggested that the service does not appear accessible for those outside the HRM.	**III**
	1. Pyra, K. and Heath, S., *Evaluation of the Anonymous HIV Testing Program*, Planned Parenthood Metro Clinic, 2003, Nov. Hepatitis B and C testing has become an important feature of the anonymous testing service in N.S.	**III**

2. The counselling component of counselling, testing and referral services includes, but is not limited to: 2.1 Information on hepatitis B, hepatitis C and HIV transmission and prevention 2.2 Assessment of personal risk 2.3 Information on available testing options 2.4 Implications of testing including health, legal, insurance, employment and social 2.5 Risk reduction strategies including safer sex and safer drug use	**2.**Canadian Medical Association, *Counselling Guidelines for HIV Testing*, 1995.* The guidelines highlight components of pretest and posttest counselling. **2.** Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, *Revised Guidelines for HIV Counseling, Testing and Referral*, Recommendations and Reports, vol. 50(RR19), pp. 1-58, 2001, Nov. For persons at increased HIV risk, certain prevention counselling approaches can be effective in reducing high risk behavior. The counselling approach is critical to effectiveness. (Original reference: Kamb, M.L., et al, *Efficacy of Risk-Reduction Counseling to Prevent Human Immunodeficiency Virus and Sexually Transmitted Diseases: a Randomized Controlled Trial*, Journal of the American Medical Association, Vol. 280, pp. 1161-7, 1998. **2.** Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, *Revised Guidelines for HIV Counseling, Testing and Referral*, Recommendations and Reports, vol. 50(RR19), pp. 1-58, 2001, Nov. The guidelines provide comprehensive guidance on counselling approaches as well as various components to be included. **2.** Pyra, K. and Heath, S., *Evaluation of the Anonymous HIV Testing Program*, Planned Parenthood Metro Clinic, 2003, Nov. Although results needs to be interpreted with caution, it was reported that it appears that the high quality HIV prevention counselling provided through the service has positively impacted awareness (increased awareness and understanding) and behavior (intention to reduce risk behaviors). **2.** Pyra, K. and Heath, S., *Evaluation of the Anonymous HIV Testing Program*, Planned Parenthood Metro Clinic, 2003, Nov. Hepatitis B and C education is also provided through the HIV anonymous testing service. Report improved awareness and understanding of the issues and greater awareness of prevention strategies. **2.**Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. HCV testing in correctional institutions, HIV counselling and testing sites, or drug and STI treatment programs and such settings should include counselling and referral. **2.** Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C*	**II** **II** **II** **III** **III** **II** **II**

	Virus (HCV) Infection and HCV-Related Chronic Illness, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. As part of informed consent, people should be given information on hepatitis C disease and transmission, testing procedures, meaning and implications of test results, benefits of early detection. This information should be given prior to testing. **2.1, 2.2, 2.4 and 2.5** Centers of Excellence in Hepatitis C Research and Education, *Hepatitis C Virus (HCV) Testing and Prevention Counselling Guidelines for VA Health Care Practitioners*, HCV Educational Series, 2001. The guidelines cover a range of topics including providing information on hepatitis C (HCV), personal risk identification, testing for other diseases (including hepatitis B and HIV), risk reduction strategies and implications (advantages and disadvantages) of testing.	 **II**
3. The testing component of counselling, testing and referral services includes: 3.1 Informed consent given verbally by client 3.2 Staff who are qualified to draw a blood sample 3.3 Timely transportation of samples to laboratory based on specific testing requirements 3.4 Communication of test results to client	**3.1**UNAIDS, *Voluntary Counselling and Testing*, UNAIDS, youandaids, The HIV Portal for Asia Pacific, 2003, Dec. Available from url: www.youandaids.org/Themes/voluntarycounseling.asp. Service needs to be well planned so informed consent is always sought and counselling offered before client takes an HIV test. **3.1 and 3.4** Canadian Medical Association, *Counselling Guidelines for HIV Testing*, 1995.* The counselling guidelines address informed consent and communicating test results. **3.1**Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. Consent for testing should be obtained in a way consistent with other medical services in the same setting and include measures to ensure confidentiality. **3.1 and 3.4** Centers of Excellence in Hepatitis C Research and Education, *Hepatitis C Virus (HCV) Testing and Prevention Counselling Guidelines for VA Health Care Practitioners*, HCV Educational Series, 2001. The guidelines cover a range of topics to be discussed prior to testing (informed consent component) including providing information on hepatitis C (HCV), personal risk identification, testing for other diseases (including hepatitis B and HIV), risk reduction strategies and implications (advantages and disadvantages) of testing. The guidelines also provide guidance for posttest counselling and informing clients of test results.	**II** **II** **II** **II**
4. The referral component of counselling, testing and referral services facilitate	**4.**World Health Organization, *Testing and Counselling*. Available at url: www.who.int/hiv/topics/vct/testing/en. Re: Human Resources, Infrastructure and Supplies Needed –	**II**

access to other services such as primary health care, addictions treatment, mental health services, health promotion, disease prevention and education services, and other social, health, community and legal services.	"mechanisms for referral and care services will be needed.	
	4.World Health Organization, *Testing and Counselling*. Available at url: www.who.int/hiv/topics/vct/testing/en. Re: Human Resources, Infrastructure and Supplies Needed – need effective partnerships to extend beyond the health sector and strengthen linkages with prevention and support services including psychosocial and legal services.	**II**
	4. UNAIDS, *Voluntary Counselling and Testing*, UNAIDS, youandaids, The HIV Portal for Asia Pacific, 2003, Dec. Available from url: www.youandaids.org/Themes/voluntarycounseling.asp. Referral system for comprehensive HIV prevention, care and support should be developed in consultation with community-based organizations, NGOs and other service managers as well as networks of people living with HIV/AIDS.	**II**
	4. Canadian Medical Association, *Counselling Guidelines for HIV Testing*, 1995.* Refers to providing support and follow up for clients.	**II**
	4. Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, *Revised Guidelines for HIV Counseling, Testing and Referral*, Recommendations and Reports, vol. 50(RR19), pp. 1-58, 2001, Nov. Typical referral (assess care and support needs, prioritize and assist in accessing services; not ongoing follow up) needs are highlighted including medical evaluation, care and treatment, prevention case management, partner counselling and referral services, reproductive health services, drug or alcohol prevention and treatment, mental health services, legal services, STD screening and treatment for viral hepatitis and other services.	**II**
	4. Pyra, K. and Heath, S., *Evaluation of the Anonymous HIV Testing Program*, Planned Parenthood Metro Clinic, 2003, Nov. About one half of the anonymous testing clients were referred to other supports and services including other Planned Parenthood Metro Clinic services, AIDS organizations, addictions services, etc	**III**
	4. Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. Counselling in correctional institutions, HIV counselling and testing sites, or drug and STI	**II**

	treatment programs and such settings should include counselling and referral. **4.**Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. Facilities providing HCV testing should have information about referral resources including availability, accessibility, and any eligibility criteria for access.	 **II**
5. Counselling, testing and referral services provide access to hepatitis A and hepatitis B immunization for people who use injection drugs, as recommended by the National Advisory Committee on Immunization (NACI) (advisory to the Division of Immunization and Respiratory Diseases, Population and Public Health Branch, Health Canada).	**5.** Health Canada, Division of Immunization and Respiratory Diseases, *Vaccine Preventable Diseases, Hepatitis B.* National Advisory Committee on Immunization (advisory to Health Canada) Recommended Usage - Hepatitis B prevention should include programs for universal immunization of children, universal screening of all pregnant women for HBsAg, pre-exposure immunization of high-risk groups, and post-exposure intervention for those exposed to disease, particularly infants born to HBV infected mothers. URL: http://www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/vpd-mev/hepatitis-b_e.html **5.** Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. Counselling for people who use injection drugs and are at risk for STIs should be counseled on minimizing risk of infection or transmission to others including the need for vaccination against hepatitis B. People who use illicit drugs (injecting and non-injecting) and sexually active men who have sex with men should be vaccinated against hepatitis A. **5.** Canadian Association for Study of the Liver, Proceedings of a consensus conference held in Montreal, Quebec in March 1999, Preventing hepatitis A infections. Available at URL: http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/casl-acef/vhg_e.html#tab7. The recommended usage for pre-exposure prophylaxis against hepatitis A listing of potential candidates for immunization includes among others "people with life-style determined risks of infection, including those engaging in oral or intravenous illicit drug use in unsanitary conditions" and "men who have sex with men". (Original reference: National Advisory Committee on Immunization statement. Laboratory Centre for Disease Control. Can Fam Physician 1995 41:1222-8.)	**II** **II** **II**
6. Counselling, testing and referral services use screening tests and repeat confirmatory testing for positive results.	**6.**World Health Organization, *Testing and Counselling*. Available at url: www.who.int/hiv/topics/vct/testing/en. Within the context of rapid HIV tests, reactive results can be confirmed using a combination of 2 or 3 rapid tests. "To avoid clerical and technical errors the HIV	**II**

	seropositive status needs to be confirmed again on a separate blood sample." **6.** Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. It is recommended that routine testing for asymptomatic persons include both a test for anti-HCV and confirmatory testing with a more specific assay.	**II**
7. Counselling, testing and referral services utilize testing technologies that meet Public Health Laboratory Standards and are endorsed by the designated provincial laboratory for Nova Scotia.	**7.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers).	**IV**
8. Counselling, testing and referral services follow legislated reporting requirements for communicable disease.	**8.** Reporting Requirements for HIV Positive Persons Regulations made under Section 12 of the *Health Act*, R.S.N.S. 1989, c.195, O.I.C. 2000-101 (March 8, 2000), N.S. Reg. 31/2000.	**Legislation**
9. Counselling, testing and referral services inform, and support clients in meeting legislated partner notification requirements.	**9.**Reporting Requirements for HIV Positive Persons Regulations made under Section 12 of the *Health Act*, R.S.N.S. 1989, c.195, O.I.C. 2000-101 (March 8, 2000), N.S. Reg. 31/2000. Outlines responsibility of person to inform partners of positive test result. Perosn may transfer responsibility to physician or public health nurse.	**Legislation**
10. Counselling testing and referral services are implemented in ways to reduce barriers to access and take into consideration: 10.1 Confidentiality and/or anonymity as perceived by the client 10.2 Multi service environment 10.3 Recognition of the critical nature of counselling 10.4 Mechanisms for client input/advice on service development and delivery 10.5 Mechanisms for community	**10.** UNAIDS, *Voluntary Counselling and Testing*, UNAIDS, youandaids, The HIV Portal for Asia Pacific, 2003, Dec. Available from url: www.youandaids.org/Themes/voluntarycounseling.asp. Counselling should be integrated with other services such as STD, antenatal and family-planning clinics. **10.** Canadian Medical Association, *Counselling Guidelines for HIV Testing*, 1995.* Outlines confidentiality guidelines. **10.1, 10.4, 10.5 and10.6** Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, *Revised Guidelines for HIV Counseling, Testing and Referral*, Recommendations and Reports, vol. 50(RR19), pp. 1-58, 2001, Nov. Addressing barriers section highlights accessibility, availability and responsiveness to client and community needs and priorities. Also highlights confidentiality, availability of anonymous HIV testing and access.	**II** **II** **II**

input/advice on service development and delivery 10.6 Accessibility to target populations		
11. Counselling, testing and referral services ensure that staff is accepted by the clients.	**11.**Provincial Anonymous Testing Steering Committee, *Background Document in Support of Expanded Access to Anonymous HIV Testing Services in Nova Scotia*, 2001, Dec. Refer to criteria for counselors. **11.** Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, *Revised Guidelines for HIV Counseling, Testing and Referral*, Recommendations and Reports, vol. 50(RR19), pp. 1-58, 2001, Nov. The guidelines address who should deliver prevention counselling; characteristics include the "ability to engender a supportive atmosphere and build trust with the client." (Characteristics were developed by the Technical Expert Panel Review of CDC HIV Counseling, Testing and Referral Guidelines, February 18-19, 1999, Atlanta, Georgia) **11.** Pyra, K. and Heath, S., *Evaluation of the Anonymous HIV Testing Program*, Planned Parenthood Metro Clinic, 2003, Nov. Evaluation findings reveal the service is unbiased, nonjudgemental, supportive and anonymous. A key factor is the staff – expertise and approach is highly valued and respected among clients and service partners.	**III** **II** **III**

* It has been reported that the Canadian Medical Association is in the process of updating counselling guidelines.

Needle Exchange Standards

Standard Statements	Evidence	Level of Evidence
1. Needle exchange services include: 1.1. Distribution of clean needles, syringes and other drug using supplies 1.2. Collection and proper disposal of needles, syringes and other drug using supplies 1.2.1 From individual clients 1.2.2 From community locations 1.3. Education for clients (refer to Needle Exchange standard statement 3. for a more detailed outline of educational elements)	**1.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **1.1**Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Recommend – availability of a range of injection equipment including variety of needles, syringe barrels, butterflies, filters, swabs, sterile water and spoons – free or minimum cost. **1.1** Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs***,** AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. Available at URL: www.medscape.com/viewarticle/410302 Provision of additional services/ supplies (sterile water, clean cotton, alcohol wipes, bleach, other safe injection equipment, condoms and sanitary supplies) can make NEP more user friendly and can optimize participation and impact. **1.1**Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Strive to provide maximum access to supplies including clean needles and syringes, sterile water, condoms, lubricant, etc. **1.1 and 1.2.2** Satcher, D. *Evidence-based Findings on the Efficacy of Syringe Exchange Programs: an Analysis of the Scientific Research Completed Since April 1998* U.S Department of Health and Human Services, Washington, DC, March 17, 2000. Research that HIV-1 can survive in a contaminated syringe over 4 weeks and can be infectious to people who reuse over this prolonged period. (original reference: Abdala, N., Stephens, P.C., Griffith, B.P., Heimer, R. *Survival of HIV-1 in Syringes*. Journal of Acquired Immune Deficiency Syndrome Human Retroviral, Vol. 20, No. 1, pp. 73-80, Jan 1, 1999.)Evidence that 10.9% of used syringes returned at community locations (original reference: Reiley, E., Beilenson, P., Vlahov, D., Smith, L., Koenig, M., et al *Operation Red Box: a pilot project of needle and syringe drop boxes for injection drug*	**IV** **III** **I** **II** **I**

	users in East Baltimore, Journal of Acquired Immune Deficiency Syndrome Human Retroviral, Vol. 18 Supplement 1, pp. S120-125, 1998.) and 27% of contaminated syringes returned to needle exchange site were positive for HIV (original reference: Robles, R. *Syringe and Needle Exchange as HIV/AIDS Prevention for Injection Drug Users in Puerto Rico*, Health Polcy, Vol. 45, pp. 209-220, 1998). Provides rationale for removal of used syringes from the community environment.	
	1.2 Canadian Centre on Substance Abuse (CCSA) National Working Group on Policy, *Syringe Exchange: One Approach to Preventing Drug-related HIV Infection* (a policy discussion paper), Canadian Centre on Substance Abuse, 1994, Dec. Studies suggest factors to maximize effectiveness – "appropriate information and counselling concerning drug use, sexual practices and HIV; that is, a package of services must be made available to users."	**II**
	1.2.2 Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Suggest development of an overall plan for safe disposal of needles in their community. The plan needs to address providing sharps containers in supervised settings, pick up of discarded needles from streets, schoolyards, parks and alleys and providing small sharps containers to clients.	**II**
	1.1and 1.3 Oberdorfer A, Oberdorfer AL, Tran DT, *Behavioural interventions for preventing hepatitis B and/or C (Protocol)* The Cochrane Library Background discusses behavioral interventions for HIV/STI prevention – mentions a harm reduction program among drug users in Svetlogorsk, Belarus, which included education about safe injecting and safe sex and which provided clean syringes, was found to have a momentous impact. Within two years after the intervention the proportion of those sharing syringes had dropped from 92 to 35 per cent (from UNAIDS 2000 Report on the Global Epidemic).	**I**
	1.3 Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Gaps identified – concern that needle exchange measures are not preventing hep C among IDUs. Needle exchange needs to be a public health activity and include improving health knowledge and injection technique.	**III**

	1.3 Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Gaps identified – peer education services to promote use of new needles and other equipment and health education. Needle exchange ineffective infection prevention strategy without appropriate education.	**III**
	1.3 Public Health Division, Department of Human Services, Victorian State Government, Australia, *Needle and Syringe Exchange Program: a Key Measure Against HIV and Hep C.* Australia has been successful in containing the HIV epidemic among injection drug users, while hep C incidence and prevalence is high and patterns of infection differ. Recommend services to be complemented by education programs, including peer education and outreach to particular groups of IDUs. IDUs concern for hep C has increased demand for needles and other supplies.	**I**
	1.3 Canadian HIV/AIDS Legal Network, *Injection Drug Use and HIV/AIDS 2002/2003 Needle Exchange Programs* Based on review of service, suggest that needle exchange services are useful ways to contact IDUs to provide education and counselling and connect to other health care services and drug treatment programs.	**III**
	1.3 Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. An integral part of NEP is educational programming to clients.	**II**
2. Needle exchange services may also include: 2.1. Male and female condoms and oral dams 2.2. Client-centred advocacy 2.3. Peer support 2.4. Peer education 2.5. Outreach 2.6. Community education 2.7. Partnership building	**2.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). Increasing the success of a needle exchange service requires the addition of services beyond the essential three. The addition of any and/or all of the six elements listed improve the connection with clients and the community and contribute to the success of the overall service.	**IV**
	2.Media report, The Medical Post, by M. Smith: *Needle Exchange Reduces Risk of HIV Infection Health benefits of needle exchange program shown for first time,* Ontario Treatment Network. Researcher Lynne Leonard's (University of Ottawa) evaluation of The Site/La Site in Ottawa. Getting needles from The Site was associated with a relative risk reduction of 67% in the chance of becoming HIV-infected through using injection drugs. Needle exchange clients for over 6 months had a 56% reduction in risk of infection. People getting needles from pharmacies had doubled risk of becoming HIV infected – suggest needle exchange	**I**

	offers other programs such as counselling which may be a protective factor.	
	2. Strike, C.J., Challacombe, L., Myers, T., Millson, M., *Needle Exchange Programs Delivery and Access Issues*. Literature suggests attracting and retaining clients, encouraging behavior change and reducing spread of blood borne pathogens, services need to address client needs in terms of location, time and space. Workers and others report effectiveness in reducing blood borne pathogen is dependent in part on ability to provide accessible and comprehensive services.	**III**
	2. Satcher, D. *Evidence-based Findings on the Efficacy of Syringe Exchange Programs: an Analysis of the Scientific Research Completed Since April 1998* U.S Department of Health and Human Services, Washington, DC, March 17, 2000. In addition to exchanging clean for used needles, 97% of services in the study survey provide a range of other services including referral to substance abuse treatment, prevention education for STIs and HIV counselling and testing, TB screening and primary health care.	**III**
	2. Canadian Centre on Substance Abuse (CCSA) National Working Group on Policy, *Syringe Exchange: One Approach to Preventing Drug-related HIV Infection* (a policy discussion paper), Canadian Centre on Substance Abuse, 1994, Dec. Studies suggest factors to maximize effectiveness – "appropriate information and counselling concerning drug use, sexual practices and HIV; that is, a package of services must be made available to users."	**II**
	2.1 Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Strive to provide maximum access to supplies including clean needles and syringes, sterile water, condoms, lubricant, etc.	**II**
	2.3 Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Gaps identified – peer education services to promote use of new needles and other equipment and health education. (Peer support)	**III**
	2.3 and 2.5 Public Health Division, Department of Human Services, Victorian State Government, Australia,	**II**

	Needle and Syringe Exchange Program: a Key Measure Against HIV and Hep C. Australia has been successful in containing the HIV epidemic among injection drug users, while hep C incidence and prevalence is high and patterns of infection differ. Recommend services to be complemented by education programs, including peer education and outreach to particular groups of IDUs. IDUs concern for hep C has increased demand for needles and other supplies.	
	2.5 Satcher, D. *Evidence-based Findings on the Efficacy of Syringe Exchange Programs: an Analysis of the Scientific Research Completed Since April 1998* U.S Department of Health and Human Services, Washington, DC, March 17, 2000. Needle exchange programs play unique role in facilitating engagement of high risk IDU populations in meaningful prevention interventions and treatment opportunities when implemented as part of a comprehensive HIV prevention and substance abuse strategy.	**I**
	2.6 Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Issues identified – userphobia: "hostile attitudes towards IDUs of many pharmacists, health care workers, some needles exchange workers (especially those in secondary outlets such as community health centres, accident and emergency centers, etc.), police, media and the general community." Recommend education campaigns and further ongoing training for needle exchange workers, especially those for whom needle distribution was only a small part of their work.	**III**
	2.6 Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Where possible provide information to the community about plan for safe disposal and the numbers of needles etc distributed and returned.	**II**
	2.7 Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. (Available at URL www.medscape.com/viewarticle/410302) Needle exchanges are more successful when health care workers, policy makers, law enforcement, and minority leaders all work together to establish the service in a local area. Collaboration with community leaders help it be more user-friendly (for the community and for clients) (Original reference: Somhai, A.M., et al, *"Lifepoint": a Case*	**I**

	Study in Using Social Science Community Identification Data to Guide the Implementation of a Needle Exchange Program, AIDS Education Prevention, Vol. 11, pp. 187-202, 1999.). **2.6 and 2.7** Canadian Centre on Substance Abuse (CCSA) National Working Group on Policy, *Syringe Exchange: One Approach to Preventing Drug-related HIV Infection* (a policy discussion paper), Canadian Centre on Substance Abuse, 1994, Dec. Studies suggest factors to maximize effectiveness – "supportive local community and public health programs." (Note: community education and partnership building are intended to contribute to support)	 **II**
3. Needle exchange services provide education to clients on topics including, but not limited to: 3.1. Blood borne pathogen infections 3.2. Sexually transmitted infections 3.3. Safer sexual practices 3.4. Safer injection practices 3.5. Harm reduction	**3.3 and 3.4** Oberdorfer A, Oberdorfer AL, Tran DT, *Behavioural interventions for preventing hepatitis B and/or C (Protocol)* The Cochrane Library Background discusses behavioral interventions for HIV/STI prevention – mentions a harm reduction program among drug users in Svetlogorsk, Belarus, which included education about safe injecting and safe sex and which provided clean syringes, was found to have a momentous impact. Within two years after the intervention the proportion of those sharing syringes had dropped from 92 to 35 per cent (from UNAIDS 2000 Report on the Global Epidemic). **3.** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. An integral part of NEP is educational programming to clients re: safer injection practices, safer sex practices, harm reduction information and the principles of general health and wellbeing.	**I** **II**
4. Needle exchange services distribute supplies based on an assessment of individual need that ensures: 4.1. Sufficient needles, syringes and other drug using supplies for a safe and clean injection every time 4.2. Sufficient needles, syringes and other drug using supplies for a period of time equal to the time period before the next possible contact (for example, until the next outreach visit or until the office reopens)	**4.**Canadian HIV/AIDS Legal Network, *Injection Drug Use and HIV/AIDS 2002/2003 Needle Exchange Programs* Issues identified: Some services limit number of needles given per visit and only provide new needles in exchange for used. The result is restricted access to clean equipment. **4.**Satcher, D. *Evidence-based Findings on the Efficacy of Syringe Exchange Programs: an Analysis of the Scientific Research Completed Since April 1998* U.S Department of Health and Human Services, Washington, DC, March 17, 2000. High incidence of Hep B and C in IDUs. Seattle study of IDUs – 70% - 80% hep C – needle exchange program did not appear protective against new hep C or hep B infection (original reference: Hagan, H., et al, *Syringe Exchange and Risk of Infection with Hepatitis B and C Viruses*, American Journal of Epidemiology, Vol. 149, pp., 203-213, 1999.). Suggests that "maximal prevention of HCV transmission among this population would require distribution of a sufficient volume of sterile syringes to preclude any reuse of injecting equipment." Empirical data supports potential protective effect for HIV	**III** **I**

	among individuals using needle exchange.	
	4.CDC National Center for HIV, STD and TB Prevention - Prevention Among Injection Drug Users *HIV Prevention Bulletin: Medical Advice for Persons who Inject Illicit Drugs* (Available at URL: www.cdc.gov/idu/pubs/hiv_prev.htm) 1995 Workshop at Johns Hopkins University in Baltimore, Maryland and published research*****, recommendations for drugs users who continue to inject drugs include – addictions treatment to reduce or stop drug injection, use of sterile syringes to reduce spread of blood borne pathogen, use of new (ideally sterile) water and equipment to prepare drugs, and disinfection of injection site to prevent local infection.	**I**
	4. CDC National Center for HIV, STD and TB Prevention - Prevention Among Injection Drug Users *HIV Prevention Bulletin: Medical Advice for Persons who Inject Illicit Drugs* (Available at URL: www.cdc.gov/idu/pubs/hiv_prev.htm) Use of alcohol swabs to clean injection site reduces occurrence of cellulites, injection site abscesses, and, possibly endocarditis among IDUs. (Original references: Spijkerman, I.J.B., et al, *Human Immunodeficiency Virus Infection and Other Risk Factors for Skin Abscesses and Endocarditis among Injection Drug Users*, Journal of Clinical Epidemiology, Vol. 49, pp. 1149-1154, 1996. Vlahov, D., et al, *Bacterial Infections and Skin Cleaning Prior to Injection Among Intravenous Drug Users*, Public Health Report, Vol. 107, pp. 595-598, 1992.)	**I**
	4. CDC National Center for HIV, STD and TB Prevention - Prevention Among Injection Drug Users *HIV Prevention Bulletin: Medical Advice for Persons who Inject Illicit Drugs* (Available at URL: www.cdc.gov/idu/pubs/hiv_prev.htm) CDC recommends that all syringes used for parenteral injections be sterile. Drug preparation equipment such as cotton, cookers, water and syringes should not be reused because they are usually contaminated with blood. (Original reference: CDC, *Improper Infection-control Practices during Employee Vaccination Programs – District of Columbia and Pennsylvania, 1993*, MMWRVol. 42, pp.969-971, 1993.	**I**
	4. Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Strive to distribute as many supplies as the individual client requires to meet their needs; provide enough syringes to be able to use a clean	**II**

	one for each injection.	
5. Needle exchange services provide sufficient supplies to an individual for secondary distribution to other people who use injection drugs in their community based on an assessment of need in that community.	**5.**Rich, J.D., et al, *HIV Prevention - Strategies to Improve Access to Sterile Syringes for Injection Drug Users*, AIDS Read, Vol. 12, No. 12, pp. 527-535, 2002. (Available at URL: www.medscape.com/viewarticle/446813) There is indirect protection against disease through "secondary exchange" – provision of sterile needles by clients to IDU peers in community who have no service or lack access to needles (original reference: Bastos, F.I., Strathdee, S.A., *Evaluating Effectiveness of Syringe Exchange Programmes: Current Issues and Future Prospects*, Social Science Medicine, Vol. 51, pp. 1771-1782, 2000). Direct use of needle exchange provides better protection than secondary receipt by another client (original reference: Vamente, T.W. et al, *Needle-exchange Participation, Effectiveness, and Policy,: Syringe Relay, Gender and the Paradox of Public Health*, Journal of Urban Health, Vol. 78, pp.340-349, 2001.), but secondary exchange of needles, safer injection equipment and disease prevention information may be an important mechanism for reaching some IDUs. **5.** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. People may seek supplies for others. It is acceptable to provide supplies for the purposes of secondary distribution.	**I** **II**
6. Needle exchange services have referral procedures that facilitate access to other services such as primary health care, addictions treatment, mental health services, health promotion, disease prevention and education services, and other social, health, community and legal services.	**6.**Canadian HIV/AIDS Legal Network, *Injection Drug Use and HIV/AIDS 2002/2003 Needle Exchange Programs* Based on review of service, suggest that needle exchange services are useful ways to contact IDUs to provide education and counselling and connect to other health care services and drug treatment programs. **6.** Rich, J.D., et al, *HIV Prevention - Strategies to Improve Access to Sterile Syringes for Injection Drug Users*, AIDS Read, Vol. 12, No. 12, pp. 527-535, 2002. (Available at URL: www.medscape.com/viewarticle/446813) Needle exchanges are conduits for drug treatment and rehabilitation for drug-addicted participants**. Seattle study – new users of needle exchange were 5 times more likely to seek drug treatment than IDUs who never used a needle exchange, and those that used a service were more likely to remain in drug treatment (original reference: Des Jarlasi, D.C., *"Single-use" Needles and Syringes for the Prevention of HIV Infection Among Injection Drug Users*, Journal of Acquired Immune Deficiency Syndrome Human Retroviral, Vol. 18 (supplement 1), pp. S52-S56, 1998). **6.** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for	**III** **I** **II**

	Disease Control, 2003, Feb. Guidelines based on an extensive literature review. An integral part of a needle exchange practice is to develop referral pathways that are user friendly and perceived by the clients as accessible.	
7. Needle exchange services provide access to hepatitis A and hepatitis B immunization for people who use injection drugs, as recommended by the National Advisory Committee on Immunization (NACI) (advisory to the Division of Immunization and Respiratory Diseases, Population and Public Health Branch, Health Canada).	**7.** Health Canada, Division of Immunization and Respiratory Diseases, *Vaccine Preventable Diseases, Hepatitis B.* Recommended Usage - Hepatitis B prevention should include programs for universal immunization of children, universal screening of all pregnant women for HBsAg, pre-exposure immunization of high-risk groups, and post-exposure intervention for those exposed to disease, particularly infants born to HBV infected mothers. URL: http://www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/vpd-mev/hepatitis-b_e.html **7.** Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. Counselling for people who use injection drugs and are at risk for STIs should be counseled on minimizing risk of infection or transmission to others including the need for vaccination against hepatitis B. People who use illicit drugs (injecting and non-injecting) and sexually active men who have sex with men should be vaccinated against hepatitis A.	**II** **II**
8. Needle exchange services support safe discarding of used injection and other drug using supplies by, but not limited to: 8.1. Providing information to clients on safe disposal of needles, syringes and other drug using supplies 8.2. Encouraging clients to return needles, syringes and other drug using supplies to the service or other approved collection sites (including designated pharmacies) 8.3. Providing sharps containers to clients 8.4. Providing sharps containers to appropriate community locations	**8.**Golub, E.T., Strathdee, S.A. *Sidebar: Editorial Comment: Syringes Access Versus Syringe Disposal – The Law of Diminishing Returns?* MedScape Reference to Kaplan, E.H. et al *A Decline in HIV-infected Needles Returned to New Haven's Needle Exchange Program: Client Shift or Needle Exchange?* American Journal of Public Health, vol. 84, pp. 1991-1994, 1994. Needle circulation times were a significant predictor of HIV prevalence. The circulation of a used syringe is reduced if there are multiple methods of safe disposal available to IDUs. **8.** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Should be strong emphasis on encouraging people to either return their used needles and syringes or dispose of them properly. **8.3 and 8.4** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Suggest development of an overall plan for safe disposal of needles in their community. The plan needs to address providing sharps containers in supervised settings, pick up of discarded needles from streets, schoolyards, parks and alleys and providing small sharps containers to clients.	**I** **II** **II**

	8.4 Riley, E. et al, *Operation Red Box: a Pilot Project of Needle and Syringe drop Boxes for Injection Drug Users in East Baltimore*, Journal of Acquired Immune Deficiency Syndrome Human Retrovirology, vol. 18 (suppl 1), pp. S120-125, 1998.Converted mailboxes placed throughout community for needle/ syringe disposal. 10.9% of needles collected tested positive for HIV. Suggest programs can succeed in removing infected needles/ syringes from community.	**I**
9. Needle exchange services collection service (collection of used injection and other drug using supplies from the community) have procedures for safe collection and disposal of used injection and other drug using supplies that include, but are not limited to: 9.1. Use of gloves and/or other appropriate protective equipment 9.2. Use of sharps containers 9.3. Disposal of full sharps containers	**9.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **9.** Golub, E.T., Strathdee, S.A. *Sidebar: Editorial Comment: Syringes Access Versus Syringe Disposal – The Law of Diminishing Returns?* MedScape Reference to Kaplan, E.H. et al *A Decline in HIV-infected Needles Returned to New Haven's Needle Exchange Program: Client Shift or Needle Exchange?* American Journal of Public Health, vol. 84, pp. 1991-1994, 1994. Needle circulation times were a significant predictor of HIV prevalence. The circulation of a used syringe is reduced if there are multiple methods of safe disposal available to IDUs. **9.** Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. Guidelines suggest that NEPs have a plan for the safe transportation and disposal of needles.	**IV** **I** **II**
10. Needle exchange services have policy and procedures that define acceptable client behaviour and that address unacceptable behaviour, including protocols for the involvement of outside agencies such as law enforcement.	**10.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers).	**IV**
11. Needle exchange services have procedures to ensure safe storage of clean needles, syringes and other drug using supplies for the purposes of distribution through the service.	**11.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers).	**IV**
12. Needle exchange services have	**12.**Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10,	**I**

mechanisms for input by the clients and community.	No. 7, pp. 421-429, 2000. Available at URL www.medscape.com/viewarticle/410302 Outreach to IDUs may help to determine appropriate times and locations of services as well as raise awareness about needle exchange (Original reference: Somhai, A.M., et al, *"Lifepoint": a Case Study in Using Social Science Community Identification Data to Guide the Implementation of a Needle Exchange Program*, AIDS Education Prevention, Vol. 11, pp. 187-202, 1999.). **12.**Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. (Available at URL www.medscape.com/viewarticle/410302) Needle exchanges are more successful when health care workers, policy makers, law enforcement, and minority leaders all work together to establish the service in a local area. Collaboration with community leaders help it be more user-friendly (for the community and for clients) (Original reference: Somhai, A.M., et al, *"Lifepoint": a Case Study in Using Social Science Community Identification Data to Guide the Implementation of a Needle Exchange Program*, AIDS Education Prevention, Vol. 11, pp. 187-202, 1999.).	**I**
13. Needle exchange services ensure that staff is accepted by the clients.	**13.**Burrows, D. (IDU Policy Officer, Australian Federation of AIDS Organisations), *The State of Needle & Syringe Supply Measures in Australia – a View from Community-based Organisations* Survey of all injecting drug user groups and AIDS Councils in Australia and Department of Health officials in several jurisdictions. Issues identified – userphobia: "hostile attitudes towards IDUs of many pharmacists, health care workers, some needles exchange workers (especially those in secondary outlets such as community health centres, accident and emergency centers, etc.), police, media and the general community." Recommend education campaigns and further ongoing training for needle exchange workers, especially those for whom needle distribution was only a small part of their work. **13.**Canadian Centre on Substance Abuse (CCSA) National Working Group on Policy, *Syringe Exchange: Oe Approach to Preventing Drug-related HIV Infection* (a policy discussion paper), Canadian Centre on Substance Abuse, 1994, Dec. Studies suggest factors to maximize effectiveness – "a staff that is acceptable to and comfortable with injection drug users".	**III** **II**

***** Original references are as follows:

- 1995 workshop on the role of sterile syringes in the prevention of HIV transmission among drug users who continue to inject, Johns Hopkins University in Baltimore, Maryland. Workshop sponsored by Centers for Disease Control and Prevention (CDC), the Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental

Health Services Administration (SAMHSA), the National Institute on Drug Abuse (NIDA) of the National Institutes of Health (NIH), and the Johns Hopkins University School of Hygiene and Public Health.
- Normand, J. et al, *Preventing HIV Transmission: the Role of Sterile Needles and Bleach*, Washington DC: National Academy Press, 1995.
- Valleroy, L.A., et al, *Impact of Increased Legal Access to Needles and Syringes on Community Pharmacies' Needle and Syringe Sales – Connecticut, 1992-1993*, Journal of Acquired Immune Deficiency Syndrome Human Retroviral, Vol. 10, pp. 73-81, 1995.
- Groseclose, S.L., et al, *Impact of Increased Legal Access to Needles and Syringes on the Practices of Injecting-Drug Users and Police Officers - Connecticut, 1992-1993*, Journal of Acquired Immune Deficiency Syndrome Human Retroviral, Vol. 10, pp. 82-89, 1995.
- U.S. Prevention Services Task Force, *Guide to Clinical Preventive Services* (2nd ed.), Baltimore, MD: Williams & Wilkins, 1996.
- American Medical Association, *A Physician Guide to HIV Prevention*, Chicago, Illinois: American Medical Association, 1996.

****** Original references are as follows:
- Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. Available at URL www.medscape.com/viewarticle/410302
- Heimer, R. *Can Syringe Exchange Serve as a Conduit to Substance Abuse Treatment?* Journal of Substance Abuse Treatment, Vol. 15, pp. 183-191, 1998.
- Brooner, R., et al, *Drug Abuse Treatment Success Among Needle Exchange Participants*, Public Health Report, Vol. 113 (Supplement 1), pp. 129-139, 1998.
- Strathdee, S.A., et al *Needle-exchange Attendance and Health Care Utilization Promote Entry into Detoxification*, Journal of Urban Health, Vol. 76, pp. 448-460, 1999.

Other

Media report, The Medical Post, by M. Smith: *Needle Exchange Reduces Risk of HIV Infection Health benefits of needle exchange program shown for first time*, Ontario Treatment Network. Researcher Lynne Leonard's evaluation of The Site/La Site in Ottawa. Getting needles from The Site was associated with a relative risk reduction of 67% in the chance of becoming HIV-infected through using injection drugs. Needle exchange clients for over 6 months had a 56% reduction in risk of infection. People getting needles from pharmacies had doubled risk of becoming HIV infected – suggest needle exchange offers other programs such as counselling – may be a protective factor.

Rich, J.D., et al, *Strategies to Optimize the Impact of Needle Exchange Programs*, AIDS Reader, Vol 10, No. 7, pp. 421-429, 2000. (Available at URL www.medscape.com/viewarticle/410302) "NEPs remain a crucial component of HIV prevention for IDUs. They are effective in reducing risk behaviors and HIV incidence among IDUs and in linking a hard-to-reach population with social and medical services and with substance abuse treatment, without increasing drug use or improper discard of needles."

Christie, T., *Guidelines for Needle Exchange Programs*, Communicable Disease Manual, BC Centre for Disease Control, 2003, Feb. Guidelines based on an extensive literature review. The best evidence supports the recommendation that implementation of a community needle exchange program (NEP) be considered when bloodborne pathogen transmission is occurring in the intravenous drug-using population through the sharing of needles.

Methadone Maintenance Treatment Standards

Standard Statements	Evidence	Level of Evidence
1. Methadone maintenance treatment services provide: 1.1. Individualized dosage 1.2. Counselling	**1.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **1.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Comprehensive services and the integration of medical, counselling and administrative services are associated with better treatment outcomes (Ball & Ross, as cited in National Institute on Drug Abuse, 1995, 1-38) (See Section 4.3). **1.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. The most effective opiate agonist maintenance programs provide methadone as well as other medical, behavioral, and social services (Leshner, 1999). **1.1** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Based on the evidence reviewed, the National Institute on Drug Abuse (1995, 1-38 to 1-40) concludes that the "establishment of adequate dosing policies" is associated with treatment success and "...methadone dosage should be based on the patient's individual needs, the goals of treatment, and progress in treatment." **1.1** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. The evidence reviewed by Strain (1999b, 76) indicates that higher dose is associated with better treatment outcomes. **1.1** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Dose is one of the important factors for improved retention (D'Ippoliti et al., 1998, 171) **1.1** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy,	**IV** **I** **I** **I** **I** **I** **I**

	Health Canada, 2002. Recent research reviewed by Ward et al. (1998b, 331) found that programs with a flexible dosage policy are more likely to meet clients'/patients' needs.	
	1.1 Ministry of Health, *Delivery of Treatment for People with Opioid Dependence in New Zealand: Options and Recommendations*, Ministry of Health, New Zealand. October 1996. (Page 29, section 6.4) Reference to 1992 study Hannifin & MacDonald (Hannifin, J, MacDonald C Methadone Treatment in New Zealand. Results from a National Survey, unpublished paper, 1992) comparing New Zealand approach to US approach Centres adopting higher dose levels reported increased average length of time clients stayed in the program – NZ clients generally able to stay on methadone for longer periods of time prior to encouragement for withdrawal. Length of time is strongest predictor of treatment success (Harwood, H.J., Cavanaugh, E.R., Ginzberg, H.M., Drug Abuse Treatment: A National Study of Effectiveness. Chapel Hill NC: University of North Carolina Press, 1989.). One of the greatest influences on retention is adequate dose (Ball, J.C, Ross, A.. The Effectiveness of Methadone Maintenance Treatment: Patients, Programs, Services and Outcomes. New York: Springer-Verlag, 1991.).	**I**
	1.1 Ministry of Health, *Delivery of Treatment for People with Opioid Dependence in New Zealand: Options and Recommendations*, Ministry of Health, New Zealand. October 1996. Adequate dose of methadone is a critical factor determining effectiveness of methadone maintenance treatment. Page 17 and page 27, section 6.2.5 (The Optimum use of Methadone Prescribing) Return to initial rationale for methadone treatment as outlined by Dole and Nyswander (1965) with emphasis on "adequate" dose to block opioid receptors from effect of exogenous opioid. Dole, V.P., Nyswander, M. *A Medical Treatment for diacetylmorphine (heroin) Addiction*. Journal of the American Medical Association, Vol. 193: pp 80-84, 1965. NZ document states "One of the critical aspects of a quality intervention is the tailoring of an adequate dose of methadone for each individual."	**I**
	1.1 Faggiano, F., Vigna-Taglianti, F., Versino, E., Lemma, P., *Methadone Maintenance at Different Dosages for Opioid Dependence* (Cochrane Review) Conclusions: Methadone dosages ranging from 60 to 100 mg/day are more effective than lower dosages in retaining patients and in reducing use of heroin and cocaine during treatment. To find the optimal dose is a clinical ability, but clinicians must consider these conclusions in treatment strategies.	**I**

	1.1 Anderson, J.F. and Warren, L.D., *Client Retention in the British Columbia Methadone Program, 1996 – 1999.* Canadian Journal of Public Health Vol. 95, No. 2, pp. 104-109, 2004, Mar-Apr. Discussion: "Average daily dose is both a predictor of retention and potentially modifiable." Suggests that clients receiving low doses could be helped to remain in treatment longer if daily doses were increased.	**II**
	1.1 Millson, P.E., et al. *Self-perceived Health Among Canadian Opiate Users: A Comparison to the General Population and to Other Chronic Disease Populations.* Canadian Journal of Public Health, Vol. 95, No. 2, pp. 99-103, 2004, Mar-Apr. Findings support the need for provision of the needed range of services on site in a user-friendly environment, including methadone, primary care, counselling and psychiatric care. If this is not possible, the service needs the capacity to refer to services to meet client needs	**II**
	1.2 Ministry of Health, *Delivery of Treatment for People with Opioid Dependence in New Zealand: Options and Recommendations*, Ministry of Health, New Zealand. October 1996. Page 17, section 5.3 - Referenced re: counselling and other ancillary services – a randomized controlled study supporting the provision of psychosocial services (McLellen, AT, Arndt, IO, Metzger, DS, Woody, GE, O'Brien, CP. The Effects of psychosocial Services in Substance Abuse Treatment. Journal of the American Medical Association, Vol. 269, 1953-1959, 1993.) Investigated opioid dependent patients for 6 months and found the group with the most ancillary services yielded the best treatment outcome.	**I**
	1.2 Centre for Addiction and Mental Health, *Methadone Maintenance Treatment: Community Planning Guide*. Available from URL: http://sano.camh.net/methadone/mmtguide2.pdf. Continuity of Care for Methadone Patients section: Cites Ball, J.C., & Ross, A. *The Effectiveness of Methadone Maintenance Treatment: Patients Programs, Services and Outcome*. New York (NY): Springer Verlag, 1991. Concluded that both staff and patients viewed counselling as a key element in the methadone maintenance treatment rehabilitation process.	**III**
	1.2 Centre for Addiction and Mental Health, *Methadone Maintenance Treatment: Community Planning Guide*. Continuity of Care for Methadone Patients section: Cites Mattick, R.P., Ward, J., & Hall, W. *Methadone Maintenance Treatment and Other Opioid Replacement Therapies*. CITY: Harwood Academic Publishers, 1998. Concluded after researching the role of counselling, "there is reasonable evidence to suggest that counselling does add to the effectiveness of methadone maintenance for some patients." Noted	**I**

	that methadone maintenance treatment programs that have shown effectiveness have usually included counselling as a component.	
	1.2 College of Physicians and Surgeons of Saskatchewan and Saskatchewan Health, *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction*, Saskatchewan, May 2002. Guidelines provide written procedures on counselling as a program component. Strong evidence to support improved treatment outcomes when methadone maintenance treatment includes counselling services (coping strategies and other life skills, psychosocial services, addiction)	**II**
	1.2 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Greater amounts of counselling services are associated with better outcomes (McLellan; Strain et al., as cited in Strain, 1999b, 76).	**I**
	1.2 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. There is evidence that comprehensive counselling services provided by experienced counsellors is a factor in treatment success (Ball & Ross, as cited in National Institute on Drug Abuse, 1995, 1-38).	**I**
	1.2 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. There is a strong relationship between session attributes and therapeutic involvement. Session attributes were the number of individual counselling sessions, the number of times drugs/addiction or related health topics were discussed, and the number of times other topics were discussed in the first month of treatment (Joe et al., 1999, 117, 122).	**I**
	1.2 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. "...patients expressing greater confidence and commitment after [three] months of treatment generally began with higher motivation at intake, had formed better rapport with counselors, and attended counseling sessions more frequently" (Broome et al., 1999, Abstract).	**I**
2. Methadone maintenance treatment services provide and/or facilitate access to other services such as:	**2.** Ministry of Health, *Delivery of Treatment for People with Opioid Dependence in New Zealand: Options and Recommendations*, Ministry of Health, New Zealand. October 1996. Page 17, section 5.3 - Reference re: counselling and other ancillary services – a randomized controlled study supporting the provision of	**I**

2.1. Primary health care 2.2. Treatment for other substance use 2.3. Mental health services 2.4. Health promotion, disease prevention and education services 2.5. Other social, health, community, and legal services	psychosocial services (McLellen, AT, Arndt, IO, Metzger, DS, Woody, GE, O'Brien, CP. The Effects of psychosocial Services in Substance Abuse Treatment. Journal of the American Medical Association, Vol. 269, 1953-1959, 1993.) Investigated opioid dependent patients for 6 months and found the group with the most ancillary services yielded the best treatment outcome.	
	2. Centre for Addiction and Mental Health, *Methadone Maintenance Treatment: Community Planning Guide*. Continuity of Care for Methadone Patients section: suggest that methadone maintenance treatment clients may experience problems in a number of life areas – other concerns may jeopardize participation. Counsellor needs to understand the community services network. Help move client between services – ideal to develop protocols and communications practices.	**III**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Comprehensive services and the integration of medical, counselling and administrative services are associated with better treatment outcomes (Ball & Ross, as cited in National Institute on Drug Abuse, 1995, 1-38) (See Section 4.3).	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. The most effective opiate agonist maintenance programs provide methadone as well as other medical, behavioral, and social services (Leshner, 1999).	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Newman and Peyser (as cited in Mattick, 1998, 269) have suggested that there is a widespread belief that ancillary services are the most important components of effective methadone maintenance treatment programs, despite the fact that there is relatively little research evidence to support this idea.	**III**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Joe et al. (as cited in Ward et al.,1998b, 324) analyzed data from the TOPS study and found that increased retention was associated with providing clients/patients with access to medical, psychological and financial services during treatment.	**I**

	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Condelli (as cited in Ward et al., 1998b,324) also analyzed TOPS data and found that increases in retention were associated with higher ratings of the quality of services by clients/patients.	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Research by Maddux et al. (as cited in Ward et al.,1998b, 325) indicates that services need to be tailored to the clients'/patients' needs, and programs should take into account the extent to which clients'/patients' are interested in using such services.	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. A study by McLellan et al. (as cited in Bell, 1998a, 169) found that the greater the level of services provided, the better the treatment outcomes.	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Stated that "those programs with higher average involvement by patients used more social and public health services, maintained more consistent attendance at counselling sessions, and served patients who collectively has more similar kinds of needs (Broome et al., 1999, Abstract)	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Stated that " patient confidence was higher when referred services were more readily accessible...even patients without unmet needs have higher confidence in programs that maintain higher levels of service utilization. Thus, the therapeutic environment appears to be more positive when a broad array of patient needs are being addressed" (Broome et al., 1999, 133).	**I**
	2. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Based on their review of the evidence, Hall et al. (1998b, 51) conclude that intensity of ancillary services is a probable factor in treatment outcomes.	**I**
	2.1 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Given the prevalence of (often neglected) medical conditions among people who are dependent on opioids, the provision of primary and specialist medical treatment is a key aspect of methadone	**II**

	maintenance treatment.	
	2.1 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Lowinson et al. (1997, 410) notes that "providing primary care to substance abusers in methadone maintenance clinics could reduce the demand placed on emergency rooms and the need for hospitalization and thereby drastically cut the overall cost of their care."	**I**
	2.1 and 2.3 Millson, P.E., et al. *Self-perceived Health Among Canadian Opiate Users: A Comparison to the General Population and to Other Chronic Disease Populations.* Canadian Journal of Public Health, Vol. 95, No. 2, pp. 99-103, 2004, Mar-Apr. Findings support the need for provision of the needed range of services on site in a user-friendly environment, including methadone, primary care, counselling and psychiatric care. If this is not possible, the service needs the capacity to refer to services to meet client needs	**II**
	2.2 Hillebrand, J., Marsden, J., Finch, E., Strang, J. *Excessive Alcohol Consumption and Drinking Expectations among Clients in Methadone Maintenance*, National Addiction Centre Institute of Psychiatry, Maudsley Hospital 4, Windsor Walk, London, accepted July 23, 2001, Journal of Substance Abuse Treatment 21 155-160, 2001. Confirms research that documented the substantial extent of and lack of treatment for alcohol consumption. Expectations to change drinking behavior predicted by social pressures, functions of alcohol, drinking levels and methadone dose. Clinicians involved in alcohol assessment and counselling during methadone maintenance treatment could examine these influences to strengthen treatment provision.	**I**
	2.2 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Given the prevalence of multiple substance use behaviours among people who are dependent on opioids, the provision of other substance use treatment is a key aspect of methadone maintenance treatment.	**II**
	2.3 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Given the prevalence of mental health problems among people who are dependent on opioids, the provision of mental health services is a key aspect of methadone maintenance treatment.	**II**

	2.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Given the prevalence of risk behaviours for HIV, HCV and other blood-borne pathogens among people who are dependent on opioids, the inclusion of health promotion and disease prevention and education strategies is a key aspect of methadone maintenance treatment.	**II**
3. Methadone maintenance treatment services provide access to hepatitis A and hepatitis B immunization for people who use injection drugs, as recommended by the National Advisory Committee on Immunization (NACI) (advisory to the Division of Immunization and Respiratory Diseases, Population and Public Health Branch, Health Canada).	**3.** Health Canada, Division of Immunization and Respiratory Diseases, *Vaccine Preventable Diseases, Hepatitis B.* Recommended Usage - Hepatitis B prevention should include programs for universal immunization of children, universal screening of all pregnant women for HBsAg, pre-exposure immunization of high-risk groups, and post-exposure intervention for those exposed to disease, particularly infants born to HBV infected mothers. URL: http://www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/vpd-mev/hepatitis-b_e.html **3.** Centres for Disease Control and Prevention, *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Illness*, Recommendations and Reports, Vol. 47(RR19), pp. 1-39, 1998, Oct. Counselling for people who use injection drugs and are at risk for STIs should be counseled on minimizing risk of infection or transmission to others including the need for vaccination against hepatitis B. People who use illicit drugs (injecting and non-injecting) and sexually active men who have sex with men should be vaccinated against hepatitis A.	**II** **II**
4. Methadone maintenance treatment services have policies that define their approach that includes the following elements: 4.1. Service philosophy 4.2. Engagement 4.3. Timely access (wait time) 4.4. Retention 4.5. Maintenance orientation 4.6. Client/patient centeredness 4.7. Client/patient involvement in service development 4.8. Safety	**4.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. (Ball & Ross, as cited in Lowinson et al., p. 412, 1997.) Clear policies and procedures are linked to longer retention. **4.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. (D'Ippoliti et al., p. 171, 1998) Clinic policies are one of the most important factors for retention. **4.2 and 4.3** Health Canada, *Best Practices Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Engagement in treatment is critical – focus on engaging people in the shortest time possible. **4.3** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. (Bell et al. and Woody et al. (as cited in Ward et al., p. 326, 1998b)) Programs that provide rapid vs.. slow assessment have better retention.	**I** **I** **II** **I**

	4.3 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. (Maddux et al. (as cited in Ward et al., p. 326, 1998b)) More clients in a rapid assessment group initiated treatment – there is a trend toward increased retention among that group.	**I**
	4.4 Harwood, H.J., Cavanaugh, E.R., Ginzberg, H.M., *Drug Abuse Treatment: A National Study of Effectiveness*. Chapel Hill NC: University of North Carolina Press, 1989. Length of time is strongest predictor of treatment success	**I**
	4.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. (Ward, Mattick and Hall, 1998h, 214) Retention is necessary for changes to occur.	**I**
	4.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. (Fletcher & Battjes, 1999, 82). Drug Abuse Treatment Outcome Studies (DATOS) found that retention in methadone maintenance treatment is an important predictor of treatment outcomes.	**I**
	4.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Simpson & Sells; Ball & Ross, as cited in National Institute on Drug Abuse, 1995, 4-11, 4-14). Longer time spent in methadone maintenance treatment increases likelihood of remaining crime-free, and reducing use of heroin.	**I**
	4.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Lowinson, (1997, 412) Longer time in treatment increases reduction in criminal behavior and increases socially productive behavior (employment, school, homemaking).	**I**
	4.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Hall et al. (1998b, 53) benefits continue only as long as the client is in treatment.	**I**
	4.4 and 4.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Joseph, Stancliff and Langrod (2000, 361) may be necessary to remain in treatment for indefinite period or for life.	**III**

	4.4 and 4.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Length of time in treatment is the major factor in successful outcomes (Ball & Ross, as cited in Lowinson, et al., 1997, 412)	**I**
	4.4 and 4.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Studies reviewed by Ward et al. (1998b, 312) indicate that longer length of time in treatment is associated with improved treatment outcomes after leaving treatment.	**I**
	4.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Ward et al. (1998b, 331) maintenance rather than abstinence orientation linked to successful retention.	**I**
	4.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Ward et al citing Caplehorn et al. and McGlothlin and Anglin, programs with long term maintenance approach have better retention than short-term approach independent of treatment goals.	**I**
	4.6 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Identifying and meeting individual treatment needs is associated with treatment success (Joe, Simpson & Hubbard, as cited in National Institute on Drug Abuse, 1995, 1-38) (See Section 4.2)	**I**
	4.6 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Client/ patient centeredness. There are important considerations in meeting the needs of specific groups of clients/patients - highlighted multiple substance use behaviors, women (including pregnant women), co-morbid medical condition, prevention and treatment of Hep C, prevention and treatment of HIV, mental health disorders, correctional settings.	**II**
5. Methadone maintenance treatment services communicate (written or oral) policies and expectations to all clients at the outset of treatment.	**5.** College of Physicians and Surgeons of Saskatchewan and Saskatchewan Health, *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction*, Saskatchewan, May 2002. Guidelines provide written procedures on assessment including informed consent – includes expectations, rules and roles for client and physician. Includes the range of services (if any others) offered.. Guidelines include provision of	**II**

	information to client before treatment including treatment agreement and info on clinic hours, process, personnel etc, methadone and drugstores who dispense methadone. **5.** Department of Health and Aging, *Clinical Guidelines and Procedures for the Use of Methadone in the Maintenance Treatment of Opioid Dependence*, National Drug Strategy, Australian Government Department of Health and Aging, Commonwealth of Australia, 2003. Guidelines for "informed consent" Specify written consent. To make an informed decision, patient needs info on nature of treatment, other options, policies and expectations, consequences if breech rules, recommended duration, side effects and risks, risks of other drug use, impact of methadone on ability to drive etc, and availability of further info on the program. **5.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Clear policies and procedures are linked to longer retention (Ball & Ross, as cited in Lowinson et al., 1997, 412). **5.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Clinic policies are one of the most important factors for retention (D'Ippoliti et al., 1998, 171).	**II** **I** **I**
6. Methadone maintenance treatment services have linkages with a network of programs and services such as: 6.1. Social services 6.2. Child, youth and family services 6.3. Legal/justice supports 6.4. Education 6.5. Housing 6.6. Primary health care 6.7. Employment 6.8. Other addictions treatment 6.9. Other community resources	**6.** Centre for Addiction and Mental Health, *Methadone Maintenance Treatment: Community Planning Guide*. Continuity of Care for Methadone Patients section: suggest that methadone maintenance treatment clients may experience problems in a number of life areas – other concerns may jeopardize participation. Counsellor needs to understand the community services network. Help move client between services – ideal to develop protocols and communications practices. **6.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Stated that " patient confidence was higher when referred services were more readily accessible...even patients without unmet needs have higher confidence in programs that maintain higher levels of service utilization. Thus, the therapeutic environment appears to be more positive when a broad array of patient needs are being addressed" (Broome et al., 1999, 133).	**III** **I**
7. Methadone maintenance treatment services have policies and/or	**7.** College of Physicians and Surgeons of British Columbia, *Methadone Maintenance Guidelines.* Available from URL: www.cpsbc.bc.ca/policymanual/forms/MethMaintenanceGuidelines.pdf. The guidelines provide	**II**

procedures based on current available evidence and/or best practice that include the following program elements: 7.1. Admission criteria 7.2. Comprehensive and ongoing assessment 7.3. Toxicology screening (for example, urine testing) 7.4. Dosage adjustment 7.5. Carries (take home doses) 7.6. Management of tapering 7.7. Discharge 7.8. Contingency planning for unexpected temporary closures	written procedures/ guidelines for criteria for admission and monitoring of methadone maintenance; pharmacological management; urine drug testing; carry privileges; dosage; formulation; administration; substance abuse treatment centre; and private practitioner. **7.** College of Physicians and Surgeons of Saskatchewan and Saskatchewan Health, *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction*, Saskatchewan, May 2002. Guidelines provide written procedures on admission criteria, assessment (including informed consent and treatment agreement), provision of information to patient prior to treatment, methadone dosing, urine testing, counselling, prescribing and dispensing , carry or take-home medication, transfers between methadone facilities, pain management while on methadone, mental health issues, pregnancy, drug interactions, overdose management, involuntary discharge and methadone in Saskatchewan correctional facilities. **7.1** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. In a study by Bell et al. (as cited in Ward et al., 1998a, 193), the consequences for individuals not admitted to treatment were a 16-month delay in their entry into treatment, and their exposure in the interim to the risks of incarceration and death. **7.1** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Given the potential for methadone maintenance treatment to reduce the harms associated with opioid dependence - and the consequences of not providing treatment, restrictive admission criteria should be avoided. **7.2** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. According to studies by Bell et al. and Woody et al. (as cited in Ward et al., 1998b, 326), programs that provide rapid vs. slow assessment have better retention. A study by Maddux et al (as cited in Ward et al., 1998b, 326) did not find a statistically significant difference, but did find that more of the clients/patients in a rapid assessment group initiated treatment, and there was a trend to increased retention among this group. **7.2** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. States that "...even very early events in treatment [i.e. during first month] can have	**II** **I** **II** **I** **III**

	effects on patient decision to remain [one] year later" (Joe et al., 1999, 122).	
	7.3 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Recent research reviewed by Ward et al. (1998b, 331) suggests that programs with a "non-punitive approach to illicit drug use"are more likely to meet the needs of clients/patients.	**I**
	7.3 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. According to Stitzer et al. (as cited by Ward et al., 1998b, 326), using negative consequences, eg. reduced doses of methadone, to respond to illicit drug use during treatment has been correlated, in a number of studies, with clients/patients leaving treatment.	**I**
	7.4 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002 Recent research reviewed by Ward et al. (1998b, 331) found that programs with a flexible dosage policy are more likely to meet clients'/patients' needs.	**I**
	7.4 Anderson, J.F. and Warren, L.D., *Client Retention in the British Columbia Methadone Program, 1996 – 1999.* Canadian Journal of Public Health Vol. 95, No. 2, pp. 104-109, 2004, Mar-Apr. Discussion: "Average daily dose is both a predictor of retention and potentially modifiable." Suggests that clients receiving low doses could be helped to remain in treatment longer if daily doses were increased.	**II**
	7.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002 Studies by Grabowski et al and Pani et al. (as cited in Ward et al., 1998b, 325-326) indicate that providing take-home doses is related to retention.	**I**
	7.5 Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002 Flexible take home doses are an influential factor in retention (Lowinson et al., 1997, 412).	**I**
	7.6 Hiltunen, A.J., Eklund, C. *Withdrawal from Methadone Maintenance Treatment Reasons for not Trying to Quit Methadone*, Department of Clinical Neuroscience, Section of Psychiatry, Karolinska Institute, Stockholm, Sweden, European Addiction Research Vol. 8, pp. 38-44, 2002. Withdrawal from methadone is a	**I**

	difficult path tried by a few methadone clients – about 10% try and 50% of these succeed. Study question (what stops clients from making withdrawal attempts). Referenced other studies stating at least some methadone maintenance treatment patients can be tapered successfully and others report negative outcomes (clients leave methadone maintenance treatment). Studied factors associated with successful termination. (Policy and procedure needed for management of tapering to guide tapering and possible termination – consider success factors) **7.6** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002 Given the difficulties associated with tapering from methadone, a client/patient-centred approach to making this decision and engaging in this process is a key aspect of methadone maintenance treatment.	 **II**
8. Methadone maintenance treatment services have procedures to facilitate continuity of service for clients/patients who transfer between communities and/or other services (e.g. Corrections).	**8.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **8.** College of Physicians and Surgeons of Saskatchewan and Saskatchewan Health, *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction*, Saskatchewan, May 2002. Guidelines provide written procedures for transfer between methadone facilities, and discuss methadone in Saskatchewan correctional facilities.	**IV** **II**
9. Methadone maintenance treatment services have procedures to ensure safe and secure delivery of methadone to the service site.	**9.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **9.** *Drug Abuse Warning Network: Maine Drug-Related Mortality Patterns: 1997-2002*. Methadone related visits to emergency rooms has jumped – methadone is the drug most frequently found in overdose deaths. (Need for safety measures to in sure proper dispensing for client and no diversion to street)	**IV** **I**
10. Methadone maintenance treatment services have procedures to ensure safe and secure storage of methadone.	**10.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **10.** *Drug Abuse Warning Network: Maine Drug-Related Mortality Patterns: 1997-2002*. Methadone related visits to emergency rooms has jumped – methadone is the drug most frequently found in overdose deaths. (Need for safety measures to in sure proper dispensing for client and no diversion to street)	**IV** **I**

11. Methadone maintenance treatment services have procedures to ensure safe administration of methadone at the service site, including dispensing by qualified staff.	**11.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **11.** *Drug Abuse Warning Network: Maine Drug-Related Mortality Patterns: 1997-2002* Methadone related visits to emergency rooms has jumped – methadone is the drug most frequently found in overdose deaths. (Need for safety measures to insure proper dispensing for client and no diversion to street)	**IV** **I**
12. Methadone maintenance treatment services have procedures to guide clients on the proper transportation, storage and administration of carries (take home doses).	**12.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **12.** *Drug Abuse Warning Network: Maine Drug-Related Mortality Patterns: 1997-2002* Methadone related visits to emergency rooms has jumped – methadone is the drug most frequently found in overdose deaths. (Need for safety measures to in sure proper dispensing for client and no diversion to street) **12.** College of Physicians and Surgeons of Saskatchewan and Saskatchewan Health, *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction*, Saskatchewan, May 2002. Guidelines provide written procedures on carry or take-home medication issues.	**IV** **I** **II**
13. To ensure the safety of staff, volunteers and clients, methadone maintenance treatment services have policy and procedures that define acceptable client behaviour and that address unacceptable behaviour, up to and including discharge from the service.	**13.** Based on the input of stakeholders (professional and paraprofessional service delivery agents, researchers, community advocates, policy makers). **13.** College of Physicians and Surgeons of Saskatchewan and Saskatchewan Health, *Saskatchewan Methadone Guidelines for the Treatment of Opioid Addiction*, Saskatchewan, May 2002. Guidelines provide written procedures on involuntary discharge specifying threats, disruptive or violent behavior, especially to staff.	**IV** **II**
14. Methadone maintenance treatment services ensure that staff is accepted by the clients.	**14.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. High staff morale is associated with better treatment outcomes (Lowinson et al., 1997, 412). **14.** Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. According to recent research reviewed by Ward et al. (1998b, 331), program staff with positive attitudes to methadone treatment and to clients/patients is a factor that makes retention more likely.	**I** **I**

	14. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. States that "...there are positive consequences of a supportive and committed recovery environment for patient engagement and eventual success" (Broome et al., 1999, 134).	**III**
	14. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. States that "...patients expressing greater confidence and commitment after [three] months of treatment generally began with higher motivation at intake, had formed better rapport with counselors, and attended counseling sessions more frequently" (Broome et al., 1999, Abstract).	**I**
	14. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. "Factors that influence longer retention are...trusting and confidential relationships between the patients and the program staff" (Lowinson et al., 1997, 412)	**I**
	14. Health Canada, *Literature Review Methadone Maintenance Treatment*, Office of Canada's Drug Strategy, Health Canada, 2002. Based on their review of the evidence, Hall et al. (1998b, 51) conclude that "other relevant factors [in programs' effectiveness in reducing drug use and criminal activity] probably include the quality of the therapeutic relationships between patients and staff."	**III**

Other

Borisova, N.N., Goodman, A.C. *The Effects of Time and Money Prices on Treatment Attendance for Methadone Maintenance Clients*, Journal of Substance Abuse Treatment, Vol. 26, pp. 345-352, 2004. Economic barriers to methadone maintenance treatment (daily attendance to clinic) – using Willingness to Pay measure, negative effect of time price on treatment attendance. (Treatment time and travel time are costs to the client that may create barrier – may talk about time costs with client and balance with benefits of participation. Convenient locations and shorter waiting lists to reduce time costs)

Mattick, R.P., Breen, C., Davoli, M. *Methadone Maintenance Therapy Versus no Opioid Replacement Therapy for Opioid Dependence* (Cochrane Review) Based on meta-analysis, methadone appeared statistically significantly more effective than non-pharmacological approaches in retaining patient in treatment and in the suppression of heroin use, but not statistically in criminal activity. Conclusions: Methadone is an effective maintenance therapy intervention for the treatment of heroin dependence as it retains patients in treatment and decreases heroin use better than treatments that do not utilize opioid replacement therapy. It does not show a statistically significant superior effect on criminal activity.

Appendix A - Level of Evidence

The following scale is used to indicate the level of rigour of evidence supporting standards statements.

Level	Description
Level I	Research-based evidence of effectiveness • Studies/ evaluations using control or comparison groups • Quasi-experimental studies/ evaluations
Level II	Expert consensus of effectiveness or value • Consensus panel • Industry standard • Published best practice/ guidelines
Level III	Based primarily on expert opinion, with significant operational experience • Advice from individuals acknowledged as experts in their field • Experience, descriptive case studies from other jurisdictions
Level IV	Based on input/ opinion of a significant number of stakeholders and/ or the community