Closing the Gap:
Integrated HIV/AIDS and Hepatitis C
Strategic Directions
for Vancouver Island Health Authority

2006/07 – 2008/09

VANCOUVER ISLAND
health authority

Acknowledgements

This report would not have been possible without the vision, dedication and hard work of many individuals and organizations. The Vancouver Island Health Authority (VIHA) would like to especially thank the people living with HIV/AIDS and hepatitis C and those who struggle daily with situations--often beyond their control--that put them at significant risk of infection. Their willingness to share deeply personal stories has helped strengthen VIHA's understanding of vulnerability, disease progression and effective interventions for HIV/AIDS and hepatitis C.

VIHA would also like to thank the many community-based service providers and VIHA direct service staff across the health authority who participated in the working groups. Their steadfast commitment to this planning process has helped ensure VIHA's response to blood borne pathogens is comprehensive, integrated and clearly supports the pivotal role of the community in engaging people most at risk of infection and least able to access care once infected with HIV and hepatitis C.

For a better understanding of the natural history and complexity of HIV/AIDS and hepatitis C, VIHA would like to thank the research community, provincial health organizations and individual physicians who took the time to share and translate important new knowledge and evidence for HIV and hepatitis C prevention and treatment.

Abbreviations

AIDS	Acquired Immuno Deficiency Syndrome
ARV	Antiretroviral
ALC	Alternate Level of Care
CVI (CI)	Central Vancouver Island/ Central Island
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HSDA	Health Service Delivery Area
IDU	Injection Drug User
LHA	Local Health Area
MAT:DOT	Maximally Assisted Therapy and Directly Observed Therapy
MNRH	May Not Require Hospitalization
MOH	BC Ministry of Health
NILS	North Island Liver Service
NVI (NI)	North Vancouver Island / North Island
MSM	Men who have Sex with Men
NEP	Needle Exchange Program
PVL	Plasma Viral Load
STI	Sexually Transmitted Infections
SVI (SI)	South Vancouver Island/ South Island
VIHA	Vancouver Island Health Authority

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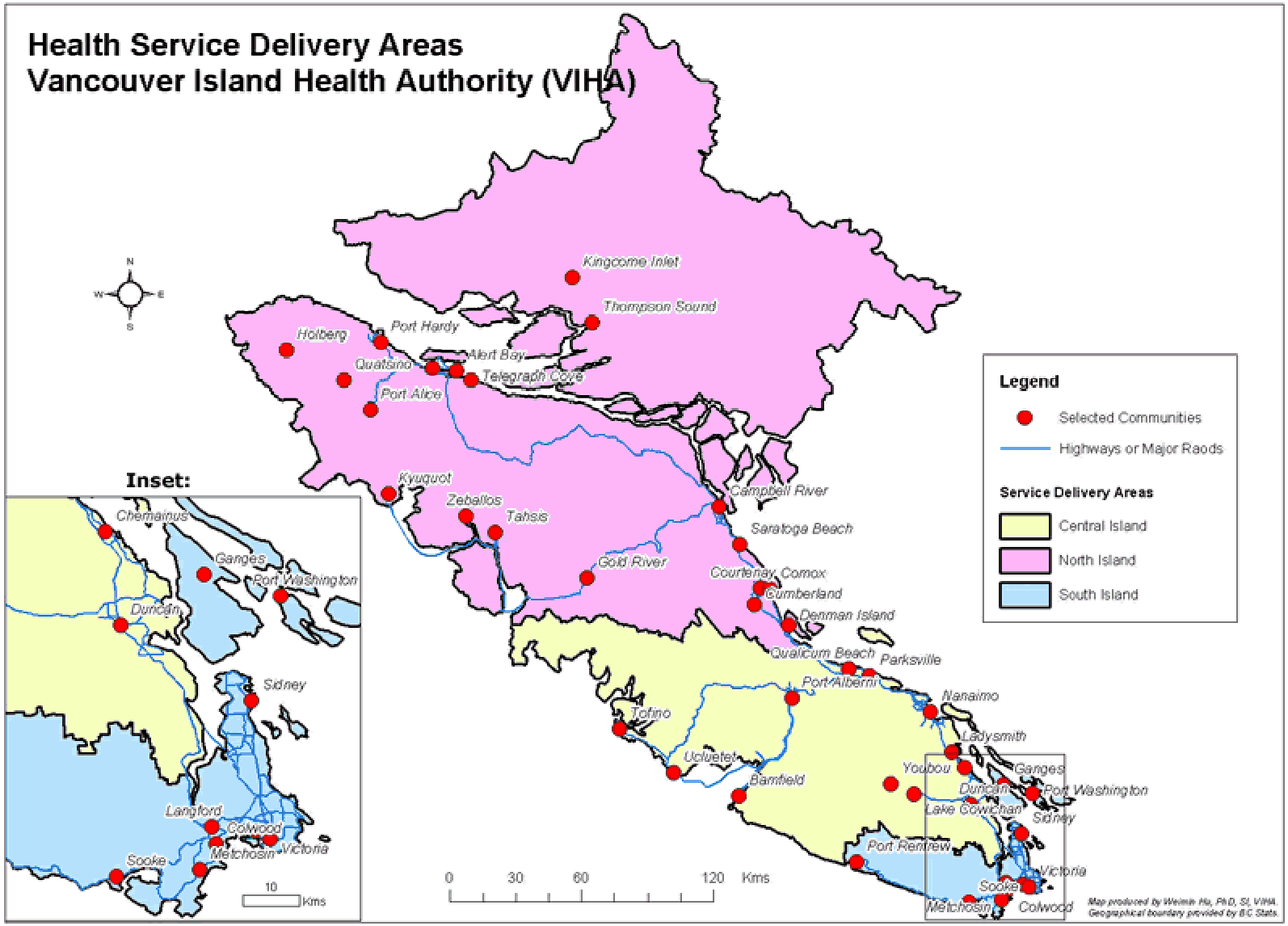


Figure 1: VIHA – Health Service Delivery Areas

Figure 2: VIHA – Local Health Areas

Executive Summary

The purpose of *Closing the Gap: Integrated HIV/AIDS and HCV Strategic Directions for Vancouver Island Health Authority* is to articulate and guide the sustainable delivery of effective HIV and hepatitis C (HCV) services in the health authority over the next three years.

The conceptual basis of the strategy combines population health analysis, health promotion, harm and stigma reduction, integrated mental health and addictions care and chronic disease management. The emphasis is on addressing factors that affect HIV and HCV vulnerability, burden of disease and effectiveness of policy and program interventions. The overarching approach is to engage people who are most at-risk for infection and have the least access to care once they are HIV and/or HCV positive.

Closing the Gap focuses on population groups that (1) have high concentrations of HIV and HCV relative to the general population; (2) are vulnerable to HIV and HCV infection due to social and economic disadvantage, substance dependence, mental illness, sexual exploitation, incarceration and/or geographical isolation; (3) experience a differential burden of risk and disease and respond differently to prevention and treatment interventions on the basis of age, gender and culture; and (4) engage in behaviours that increase the risk of infection, such unsafe drug use and/or unsafe sexual practices.

Within each population group, the strategy focuses on people who are ***at greatest risk*** of contracting HIV and HCV and people living with HIV and HCV who are ***least able*** to access care. As more resources become available this focus will expand to include those at moderate risk within each population group. The population groups include:

- Injection drug users
- Gay men and other men who have sex with men
- Aboriginal people
- Women
- Youth
- Incarcerated persons
- Sexually exploited persons and sex workers
- Persons with concurrent diagnoses

Closing the Gap proposes a comprehensive continuum of HIV and HCV services for each of the three health service delivery areas: South, Central and North Island. The core services include health promotion, prevention, harm reduction, care, treatment and support. These are supported by the core functions of surveillance, drug treatment, clinical and laboratory support, complex patient care, research and evaluation, inter-professional education, knowledge exchange, advocacy and policy change.

The strategy sets out VIHA targets for the HIV goals established by the BC Ministry of Health:

1. Prevent **87** new HIV infections between 2006/07 and 2008/09. Although the Ministry has not yet established prevention goals for HCV, VIHA expects to achieve substantial reductions in newly reported cases of HCV over the next three years.

2. Link the estimated **129** people who will become newly positive for HIV between 2006/07 and 2008/09 with appropriate care, treatment and support services. VIHA will strive to link as many people as possible who are currently living with HIV with appropriate services. It is estimated that approximately 1800 cases of HCV will be reported by 2008/09. VIHA will endeavour to link as many HCV positive individuals as possible with appropriate services.

3. Substantially increase the capacity of VIHA and its community partners to anticipate and respond to new HIV and HCV trends, affected populations and service needs.

Closing the Gap proposes a number of strategies to achieve these goals and targets. The key strategies for the prevention goal, which support the core prevention services identified in the continuum, include health promotion and primary prevention, targeted prevention with at-risk communities, "positive" prevention with people living with HIV and HCV and comprehensive needle exchange.

The key strategies for the treatment goal, which support the core care, treatment and support services, include primary health care, HIV/ HCV primary and specialist care, antiretroviral outreach, acute care, community care, multi-threshold mental health and addiction services, supported self care and housing support.

The key strategies for the capacity goal, which support the core functions, include physician and nursing services, medical transportation, enhanced surveillance and inter professional education.

In 2001, the provincial government transferred responsibility and funding for HIV services to the regional health authorities. VIHA now manages a budget of approximately $1.5 million for HIV services across the health authority. The challenge is to fund a comprehensive continuum of HIV and HCV services, as well as achieve the ambitious prevention and treatment goals established by the Ministry, within a budget originally designed to fund only HIV prevention and support. To do this, VIHA will:

- √ ***Target*** the investment of current HIV resources
- √ ***Integrate*** HIV and HCV into existing infrastructure within VIHA
- √ ***Leverage*** new resources for HIV and HCV prevention, care, treatment and support

To target investment, VIHA will use the current budget to fund two categories of HIV and HCV service delivery across the health authority. These service categories are: targeted prevention and support for at-risk groups and people living with HIV and/or HCV, and comprehensive needle exchange. Requests for proposals will be issued for core services within each category to be provided at the community and local health area level.

VIHA will incorporate HIV/ HCV primary prevention, care and treatment services into existing infrastructure within the health authority. This existing infrastructure includes Public Health, Child, Youth and Family Health, Aboriginal Health, Primary Health Care and Chronic Disease Management and Mental Health and Addictions Services. VIHA will continue to identify and leverage new sources of funding to deliver the comprehensive continuum of HIV and HCV services.

Goals and Strategies at a Glance

Prevention: 50% reduction in the number of newly reported HIV and HCV infections on Vancouver Island by 2008/09

Note: The universal and targeted prevention strategies involve reconfiguring the content and delivery of the same range of prevention services to meet the needs of the general population, at risk communities and people living with HIV and/or HCV.

Prevention Strategies			
Universal Intervention ***General Population***	**Targeted Intervention** ***At Risk Populations***	**Targeted Intervention** ***People Living with HIV/ HCV***	**Comprehensive Needle Exchange**
Provision of free condoms Testing with counselling and follow-up for STI, HIV and HCV Contact tracing and follow-up HIV and HCV information and education Safer sex/drug use information, education and counselling Sexual and reproductive health information, education and counselling General health information, education and counselling	Outreach and assessment Provision of free condoms Testing with counselling and follow-up for STI, HIV and HCV Contact tracing and follow-up Active referral to ancillary services Prevention case management HIV and HCV information and education Safer sex/drug use information, education and counselling Sexual and reproductive health information, education and counselling General health information, education and counselling Peer, family, community support	Outreach and assessment Provision of free condoms Testing with counselling and follow-up for STI, HIV and HCV Contact tracing and follow-up Active referral to ancillary services Prevention case management Treatment information and advocacy Medication management HIV/HCV nutritional support and counselling Chronic illness self care support, including wellness Safer sex/drug use information, education and counselling Sexual and reproductive health information, education, counselling Peer, family, community support	Provision of free clean needles, injection equipment and other harm reduction supplies Recovery and safe disposal of used needles and injection equipment, including improperly discarded drug paraphernalia Testing with counselling and follow-up for STI, HIV and HCV Contact tracing and follow-up Active referral to ancillary services Prevention case management HIV and HCV information and education Safer sex/drug use information, education and counselling Individual advocacy Peer, family, community support

Care, Treatment and Support: 100% of new HIV and HCV cases are linked to appropriate care, treatment and support by 2008/09

Care and Treatment Strategies			
Primary Health Care	**HIV/HCV Primary Care**	**HIV/HCV Specialist Care**	**Antiretroviral Outreach**
Expand availability of outreach nursing for inner city, rural/remote and Aboriginal communities Expand use of mobile primary health teams in rural/remote and Aboriginal communities Examine ways to link physicians and nurses with agencies serving priority populations (e.g. infrastructure support) Increase availability of primary health care services for priority populations through flexible partnership agreements Examine options for supporting general practitioners and family physicians to accept more patients from priority populations (e.g. alternate payment schemes, enhanced CME)	Strengthen capacity of existing community-based primary health care services to provide HIV and HCV primary care, for example Cool Aid Community Health Centre (Victoria). Incorporate HIV and HCV primary care into planned primary health care services, for example Ladysmith Health Centre (Central Island) and Port McNeil Health Centre (North Island). Incorporate HIV and HCV primary care into existing and planned reproductive health care services Incorporate HIV primary care into existing HCV infrastructure where feasible, for example North Island Liver Service (Campbell River)	Increase availability of HIV/ HCV physicians attached to hospitals, community clinics and in private practice. Increase availability of addiction medicine specialists attached to hospitals, community clinics and in private practice. Establish integrated HIV and HCV primary and specialist care clinics in the South Island (Victoria) and Central Island (Nanaimo to serve Central and North Island)	Explore feasibility of implementing MAT:DOT across VIHA with strong links to primary care physicians to improve ARV treatment adherence for injection drug users, street involved individuals and those with chaotic or unstable lifestyles. Work with the North Island Liver Service to strengthen interdisciplinary teams involving hepatology, substance use and mental health; explore pilot project opportunities with Chronic Disease Management Committee. Work with VIHA Mental Health and Addictions to have HIV and HCV treatment embedded within substance use programs, such as methadone maintenance.

Care and Treatment Strategies		
Acute Care	**Community Care**	**Mental Health and Addictions**
Enhance knowledge, skills, abilities and infrastructure support to provide effective hospital care for HIV/ HCV + people experiencing treatment failure, presenting at ERs with advanced disease progression, and who have concurrent disorders (e.g. HIV/ HCV, mental health and addiction) Improve outpatient system for HIV and HCV treatment, especially among vulnerable populations (e.g. IV antibiotics treatment and wound management and for homeless clients); collaborate with local health units, primary care clinics and home and community care providers Improve hospital discharge planning and support for vulnerable populations; work closely with community-based service providers to develop comprehensive and highly coordinated networks of support for discharged patients	Increase access to community-based care for people at risk for and living with HIV/ HCV with an emphasis on practical support and accompaniment Support people who are homeless or have unstable housing in transition from acute care to the community through home and community care outreach, geographically-based clinics and mobile care Incorporate needs of injection drug users into VIHA Wound Care Collaborative Expand options for community-based respite for HIV/HCV+ individuals and their families; work with community-based organizations with expertise in HIV/ HCV respite care Expand support for HIV/ HCV + individuals coming from rural/remote and Aboriginal communities for treatment in urban centres Address volume, acuity and direct care needs of HIV/HCV+ individuals in planning for future residential care, assisted living and supportive living units across VIHA Increase availability and/or accessibility of physician support for end stage AIDS Rebuild palliative care expertise in anticipation of AIDS deaths among people with limited access to drug treatment and who experience treatment failure	Ensure access to the following range of multiple threshold services and incorporate HIV and HCV management where possible: Centralized access for information, referral, initial assessment and triage Assertive case management Sobering and assessment centres Expanded withdrawal management options: • residential detox (e.g. medical, social) • outpatient detox (e.g. daytox) • home-based detox • alternative detox (e.g. acupuncture) Supportive recovery: wet, damp and dry Relapse prevention Residential treatment: wet, damp and dry Outpatient treatment Low and medium threshold methadone maintenance Supportive housing Research and development of innovative harm reduction service models: • Supervised consumption environments with wrap around low threshold services • Medical prescription of heroin

Support Strategies		
Supported Self Care	**Housing Support**	**Community Development**
Ensure the following services are available, accessible and culturally relevant for people living with HIV/HCV: o Treatment information o Medication management and adherence support o Nutritional support and counselling o Chronic illness self care support, including wellness o Peer support o Individual advocacy Establish an Island-wide network of culturally competent peer supporters and advocacy workers in major communities to provide assisted referrals, accompaniment (e.g. to doctors' offices, labs and hospitals), emotional and practical support, and help navigating systems to facilitate access to income assistance, housing, employment, child care/protection, and other legal entitlements.	Advocate with housing providers and senior levels of government for transitional and long term supportive housing that meets the needs of people most at risk of HIV/ HCV infection Advocate for non market housing to better meet needs of people living with HIV/ HCV (e.g. training and support for landlords) Work with VIHA Home and Community Care to ensure support services to designated housing units meet the needs of people living with HIV/ HCV Advocate with Wings HIV/AIDS Housing Society of BC and senior levels of government for more portable rent subsidies for people living with HIV/ HCV in VIHA	Build on the early success of the Cowichan HIV/AIDS Initiative to engage Aboriginal communities in HIV/ HCV prevention, care and treatment and support through the development of culturally relevant services for Aboriginal people, regardless of status or whether they live on or off reserve.

Capacity: Significantly enhanced capacity to anticipate and respond to new HIV and HCV trends, affected populations and service needs by 2008/09

Capacity Strategies		
Physician Services	**Nursing Services**	**Medical Transportation**
Explore alternative payment schemes to encourage fee for service physicians to provide primary health care services to marginalized or "hard to serve" patients in community-based settings Advocate for allocation of sessional funding in consultation with primary care clinics and physicians to better support HIV/ HCV treatment services in each HSDA: • South Island: Cool Aid Community Health Centre, Youth Health Clinic • Central Island: AIDS Vancouver Island Health Centre, Ladysmith Community Health Centre • North Island: North Island Liver Service, Comox Valley Nursing Centre, Port Hardy Youth Health Clinic, Port McNeil Health Centre Encourage development of shared care models or collaborative clinical networks among physicians; work with BC Centre for Excellence in HIV/AIDS and BC Hepatitis Services to increase clinical, laboratory and informatics support for community physicians Work with Island Medical Program to create HIV/ HCV clinical placement opportunities for medical students and residents in settings that serve priority populations	Expand and support role of nurse practitioners in HIV/HCV primary care. Expand nursing resources (e.g. public health, primary health, community care and hospital care nursing resources) to provide nursing clinical care as part of comprehensive needle exchange, HIV/HCV primary care, antiretroviral outreach, and multi-threshold addiction services.	Establish a secure system of medical transportation funding and support for residents and health care providers in rural/remote communities, with special attention to isolated Aboriginal communities

Capacity Strategies		
Surveillance	**Research and Evaluation**	**Inter Professional Education**
Work with BC Centre for Disease Control, BC Centre for Excellence in HIV/AIDS and Centre for Addiction BC to develop reliable HIV and HCV prevalence estimates in the general population at the VIHA, HSDA and community level. Work with BC Centre of Excellence in HIV/AIDS to create long term at-risk cohorts to establish HIV/ HCV vulnerability, incidence, prevalence, testing, antiretroviral drug use and hospital utilization. Build on infrastructure and lessons learned from VIDUS (injection drug users), CHASE (inner city residents) and Cedars (Aboriginal youth) cohort studies.	Work with BC Centre for Disease Control and BC Centre for Excellence in HIV/AIDS to access their latest research and evaluation findings, share these with community partners, and build them into service design and delivery on a continuous basis. Collaborate with community partners, BC Centre for Excellence in HIV/AIDS, Centre for Addictions Research of BC and other institutional partners to participate in research to generate evidence for local or regional needs assessment and effective HIV and HCV prevention, treatment and support. Work with BC Centre for Excellence in HIV/AIDS, Centre for Addictions Research of BC and community partners to build capacity for outcome monitoring and evaluation at the program level.	Identify and assess CME needs of community and hospital physicians engaged in HIV/ HCV prevention and treatment; work closely with BC Centre for Excellence in HIV/AIDS and BC Hepatitis Services to develop and deliver targeted CME Explore opportunities for accreditation of HIV/ HCV-related CME with College of Family Physicians of Canada and Royal College of Physicians and Surgeons; coordinate accreditation efforts through UBC Office of Continuing Professional Development and Knowledge Translation Work with BC Centre for Excellence in HIV/AIDS to increase access for community physicians to Centre's HIV preceptorship program and create local preceptorship opportunities Use hospital and community orientation, in-service and other training, hospital rounds to provide continuing education in HIV/HCV from interdisciplinary perspective Coordinate delivery of full range of HIV/HCV education for nurses, allied care providers and non-professional health care providers in residential and community settings

Introduction

HIV is no longer a medical challenge—we know how to prevent and manage HIV infection. The challenge is in the effective delivery of services. The obstacles are cultural, social and economic. The only solution here in BC is to find the political will to implement significant structural change. This can be done, but it requires a great deal of vision and leadership.

Dr. Julio Montaner, Director, BC Centre for Excellence in HIV/AIDS

The purpose of *Closing the Gap: Integrated HIV/AIDS and HCV Strategic Directions for Vancouver Island Health Authority* is to articulate and guide the sustainable delivery of effective HIV and hepatitis C (HCV) services across the health authority over the next three years.

Epidemiological data and research evidence clearly show that many groups of people at risk for HIV infection are the same as those at risk for HCV. For both diseases, the sharing of used needles and injection equipment is a critical risk factor for the transmission of infection. In Canada more than half of current hepatitis C cases and three out of every four new hepatitis C infections are attributed to injection drug use (Remis, 2004). Clearly, managing HIV and hepatitis C will require effective prevention and treatment strategies for people who inject drugs, including harm reduction and low threshold addiction treatment and support services.

While there are important differences in managing HIV and HCV that must be acknowledged in policy, programming and resource allocation, there are also enough similarities and potential benefits to support an integrated blood-borne disease approach. This plan will help the Vancouver Island Health Authority (VIHA) to build dual capacity for HIV and hepatitis C.

A comprehensive and integrated continuum of services is the foundation of an effective response to managing HIV and HCV. UNAIDS emphasizes that the most effective responses to the HIV epidemic have integrated prevention and care strategies. Experience has shown that communities are more active in mobilizing against the epidemic when they are motivated by concerns about prevention, treatment and support together (Priorities for Action, 2003).

The strategy proposes a comprehensive continuum of HIV and HCV services for each health service delivery area (HSDA): North Island, Central Island and South Island. The core services include health promotion, prevention, harm reduction, care, treatment and support. These are supported by the core functions of surveillance, drug treatment, clinical and laboratory support, complex patient care, research and evaluation, inter-professional education, knowledge transfer, advocacy and policy change. It is anticipated that VIHA will deliver the core services and functions in partnership with people living with HIV/HCV, consumer groups, community organizations and institutional partners.

The conceptual basis of the strategy combines population health analysis, health promotion, harm and stigma reduction, integrated mental health and addictions care and chronic disease management. The emphasis is on addressing factors that affect HIV and HCV vulnerability, burden of disease and effectiveness of policy and program interventions. The overarching approach is to engage people who are most at-risk for infection and have the least access to care once they are HIV/HCV positive.

The strategy sets out targets for the HIV prevention and treatment goals established by the BC Ministry of Health Services. The prevention target is to **prevent 87 new HIV infections** on Vancouver Island between 2006/07 and 2008/09. This represents a 50% reduction in the anticipated number of new HIV infections, phased in over three years, using 2004 as the baseline. Although the Province has not yet established similar prevention goals for HCV, VIHA expects to substantially reduce the estimated 1800 cases of HCV that will be newly reported on Vancouver Island between 2006/07 and 2008/09.

Each new HIV infection represents future health care costs to the taxpayer of approximately $225,000 (Kent, 1998). By preventing 87 HIV infections, VIHA will save approximately $19.6 million in health care costs over 17 years. This is the estimated average life time of direct health care costs for a person with HIV. For hepatitis C, the drug treatment alone costs an average of $15,000 per patient. If left untreated, HCV infection can frequently result in end stage liver disease. The health care costs associated with end stage liver disease have been estimated to range from $250,000 to $1 million per patient (BC Hepatitis Services, 2004).

The treatment goal is to **link the estimated 129 people who will test positive for HIV between 2006/07 and 2008/09 with appropriate care, treatment and support**. This goal represents the total number of new HIV infections that are likely to occur over the next three years, less the prevented infections. For HCV, the treatment goal is to link as many of the newly reported HCV cases in VIHA between 2006/07 and 2008/09 with appropriate care, treatment and support.

VIHA will also strive to link as many people as possible who are currently living with HIV and/or HCV with appropriate care, treatment and support. Using 2002 HIV prevalence estimates, the BC Centre for Excellence in HIV/AIDS and Health Canada estimate that between 976 and 1678 people are living with HIV and AIDS in VIHA (Hogg and Archibald, unpublished). To date, approximately 400 HIV positive individuals in VIHA are currently receiving antiretroviral therapy through the provincial HIV Drug Treatment Program.

The current investment in HIV and HCV services in VIHA is approximately $1.5 million. The efforts of consumers, community service organizations and other partners have been successful in keeping infection rates relatively low. They have also played a key role in helping to slow disease progression and improve the quality of life for people living with HIV. However, to keep pace with the changing nature of the HIV and HCV epidemics further future investment is needed on Vancouver Island.

Context

Closing the Gap was developed within the strategic contexts of the *VIHA Strategic Plan 2010*, the BC Ministry of Health Services' *Priorities for Action in Managing the Epidemics: HIV/AIDS in BC (2003 – 2007)*, and *the Federal Initiative to Address HIV/AIDS in Canada.* The strategy is closely linked to planning efforts underway across VIHA, specifically the *Primary Health Care Strategy (2006/07 – 2008/09), Chronic Disease Management Plan (2006/07 – 2008/09)*, Outpatient Care Review, *Comox-Strathcona Acute Care Options Appraisal*, *Laying the Foundation II: Increasing Access to Effective Addictions Services for Adults* and evolving strategic and operational plans in Home and Community Care, Residential Services and End of Life Care.

Method

Closing the Gap is the result of the dedicated efforts of a wide range of stakeholders over the past two years, including consumers, community organizations, public health nurses, physicians, VIHA service providers, provincial health organizations, and Aboriginal communities. The

planning process has provided an invaluable opportunity for VIHA and the community to come together on a regular basis to identify HIV and HCV-related service needs, share expertise and resources, and create new opportunities for collaborative and sustainable action.

VIHA established a regional advisory committee and three local working groups, one for each health service delivery area to help develop the strategy. The advisory committee is comprised of senior decision makers within the community, VIHA, Aboriginal health authorities, BC Ministry of Health Services, and Health Canada. The working groups are comprised of consumers, program managers and frontline staff from VIHA and community organizations in health, education, social services, law enforcement, and corrections. The bulk of the planning was carried out by the working groups with consultant support and complemented by parallel consultations with physicians, BC Centre for Excellence in HIV/AIDS, BC Centre for Disease Control and UBC Faculty of Medicine/UVic Island Medical Program.

What are HIV and Hepatitis C?

HIV/AIDS

HIV is the human immunodeficiency virus that results in a gradual destruction of the immune system, leaving the infected person vulnerable to chronic, progressive illness, opportunistic infections and cancers. HIV is transmitted through contact with infected body fluids, including blood, semen, vaginal fluids and breast milk. **HIV is most often transmitted through unprotected sexual intercourse or sharing of needles and other injection equipment**. The presence of sexually transmitted infections, such as herpes simplex, gonorrhea, syphilis and/or chlamydia, increases the risk of HIV transmission. AIDS, Acquired Immune Deficiency Syndrome, is a technical term used to mark the progression of HIV disease. It is a late consequence of HIV infection. Without treatment, AIDS-defining conditions occur on average about 10 years after a person becomes infected with HIV.

There is no vaccine to prevent HIV infection, nor is there a cure for AIDS. The disease is both incurable and 100 per cent preventable. Recent advances in antiretroviral drug therapy have extended the length and quality of life for many HIV positive persons. Today, with appropriate and timely access to treatment and support, HIV can be managed effectively as a chronic disease.

Hepatitis C

Hepatitis C is a liver disease caused by the presence of the hepatitis C virus (HCV). The virus was discovered in 1989. HCV is spread primarily through direct contact with infected human blood. Prior to 1990, the major source of HCV transmission was receipt of contaminated blood, blood products, and organ or tissue transplants. **Today, the most common form of HCV transmission is injection drug use, specifically sharing needles and other injection equipment**. Other risk factors for HCV transmission are intranasal drug use, sexual transmission, accidental needle stick injury, non-sterile skin piercing and mother to child transmission.

Approximately 25% of HCV-infected persons will clear the infection spontaneously, typically within the first few months of infection, and 75% will remain chronically infected. Without intervention, approximately 10-20% of chronically infected persons will develop cirrhosis of the liver within 10-20 years of first being infected. Of those with cirrhosis, approximately 5-10% will develop liver cancer. Due to the lengthy incubation period between HCV infection and the

development of symptoms, it is anticipated that the disease burden and social costs associated with HCV will continue to rise steadily over the years.

There is no vaccine for HCV. The current treatment is an antiretroviral known as pegylated interferon in combination with ribavarin. There are at least six HCV variations, or genotypes, and each one affects the outcome of treatment. In North America, the common variations are genotypes 1, 2 and 3. Genotype 1 requires a 48-week course of drug therapy and has a 40% – 50% chance of substantially reducing the amount of virus in the bloodstream of people who complete treatment. In contrast, genotypes 2 and 3 require 24 weeks of therapy and 75% - 80% of treated people achieve a sustained viral response. Treatment may be repeated to increase cure rates in those who do not respond to initial treatment. As a result, some experts now refer to HCV as a curable disease (CCSA, 2005).

HIV and HCV co-infection presents significant treatment challenges as it is associated with increased progression of disease and increased complexity of care. Co-infection is associated with higher levels of hepatitis C virus, more rapid progression to HCV-related liver disease, and an increased risk for HCV-related cirrhosis of the liver. Individuals co-infected with HIV and HCV experience higher mortality than individuals infected with HIV alone.

HIV and HCV on Vancouver Island

The HIV epidemic can be understood as a series of epidemics moving through different populations at different rates. The first epidemic was identified in the early 1980's and primarily affected gay men and other men who have sex with men (MSM). A second epidemic became apparent in 1994 as HIV rates soared among people who injected drugs and to a lesser extent among heterosexuals (Meeting the Challenge, 2002).

Ten years later, both HIV and HCV have established a firm foothold among younger and more marginalized populations of injection drug users, Aboriginal people and women, while HIV continues to affect gay men and MSM, especially those aged 30 – 49 years. Many of those affected by both diseases live at the margins of society. They are hard to reach and challenge current techniques for monitoring and preventing the spread of the epidemics.

Just as the HIV epidemic has changed in terms of risk factors, it has also changed in terms of gender. In the past, women made up only a small proportion of new HIV cases. In 1987, women accounted for 4% of new HIV cases in the province. By 2001, that proportion had risen to 20% of all new cases in BC. Over the same time period there has been an emerging and potent threat to the Aboriginal community, where complex socio-economic and legal factors leave people vulnerable to HIV infection. Although Aboriginal people comprise 3% of the general population, they represented 16% of newly reported HIV cases in 2001 in BC (Priorities for Action, 2003).

Incidence

The incidence of HIV and HCV is the number of new cases of infection in a specified time period. Please note, the HCV incidence data reflects the number of newly reported cases of HCV and does not distinguish between new (acute) and chronic infections. HIV incidence data reflects the number of persons testing newly positive for HIV. The incidence *rate* is the number of new infections per 100,000 population. Incidence data comes from testing results and does not include people who have not been tested but are HIV and/or HCV positive. Health Canada estimates that approximately one third of people who are HIV positive do not yet know they are infected (HIV/AIDS Epi Updates, 2004).

HIV/AIDS

In 2004, **72** people tested newly positive for HIV in VIHA, compared to **457** people in BC. This is a sharp increase from 47 new HIV cases the previous year, even with the expected increase from partner notification. In 2004, the HIV incidence rate for VIHA was 10.0, compared to the BC rate of 10.8. In 2003, the HIV incidence rate was only 7.3 for VIHA, compared to 10.1 for BC.

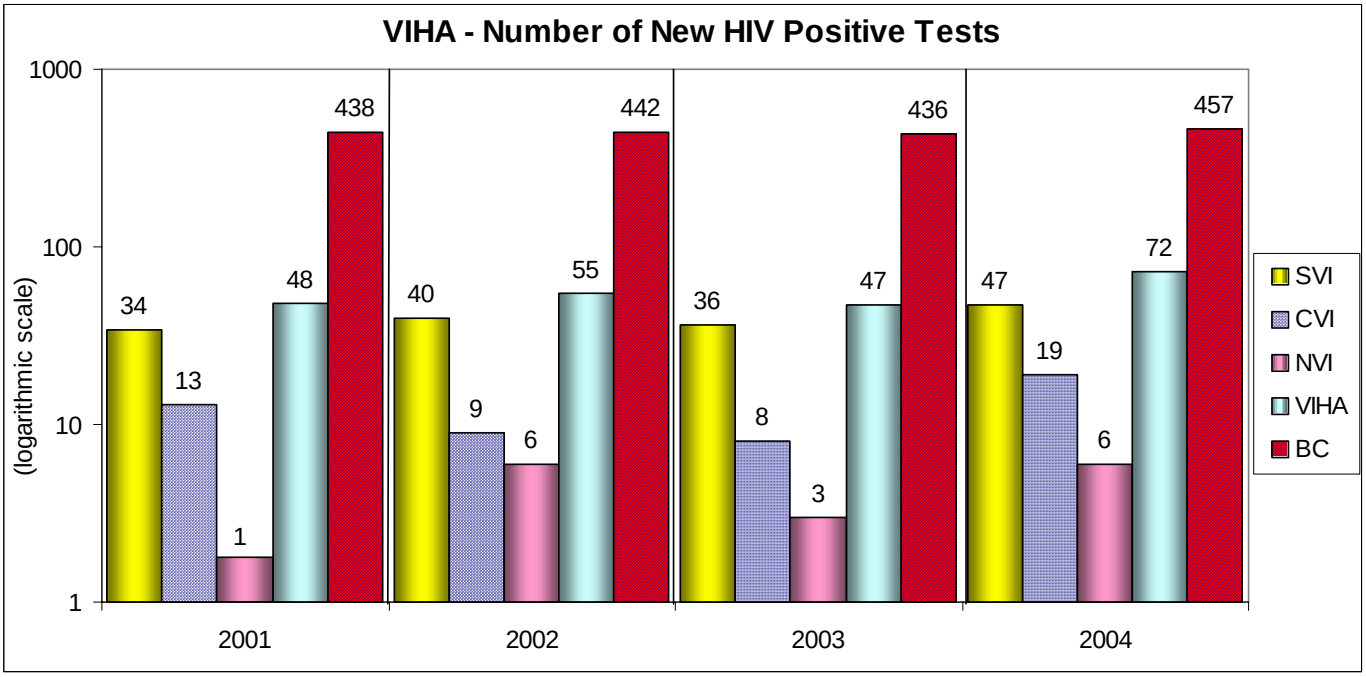


Figure 3: VIHA – Number of New HIV Positive Tests, 2001 - 2004
Source: BCCDC, HIV/AIDS Update: Annual 2003, plus unpublished data for 2004

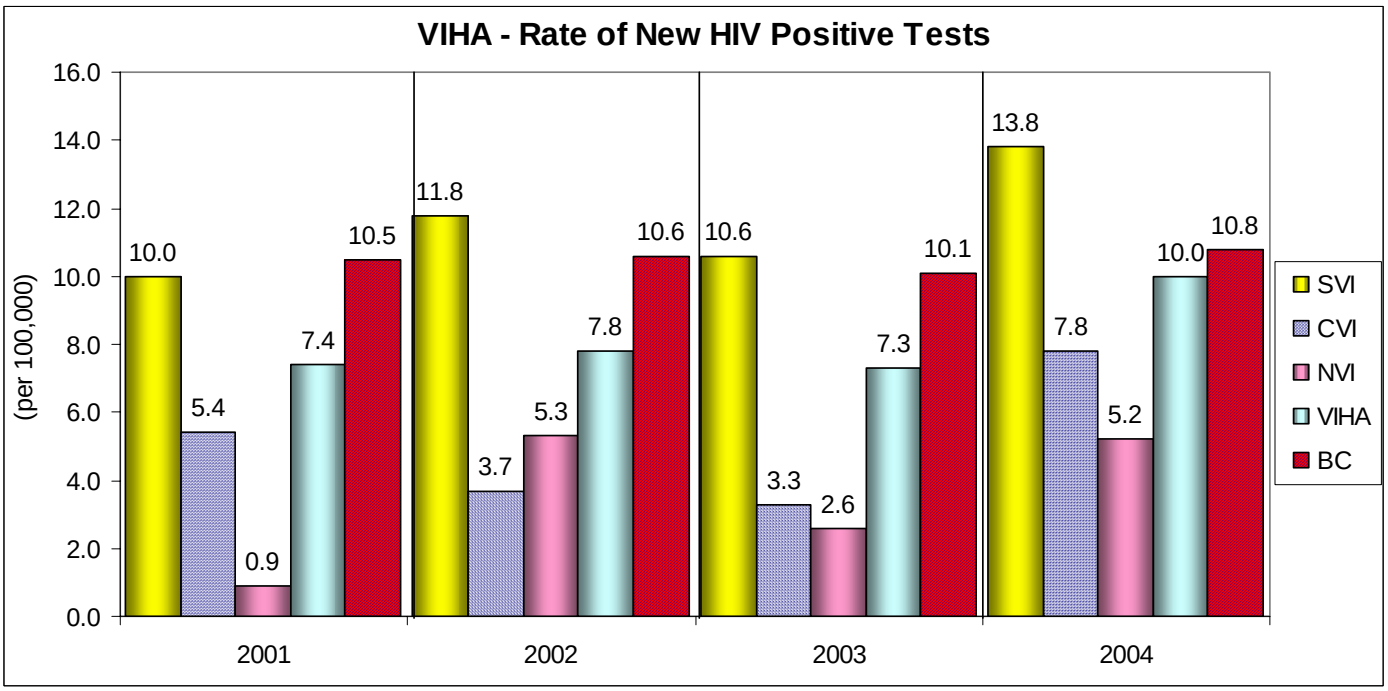


Figure 4: VIHA – Rate per 100,000 Population of New HIV Positive Tests, 2001 – 2004
Source: BCCDC, HIV/AIDS Update: Annual 2003, plus unpublished data for 2004

Of the 72 newly identified cases, 47 persons (65%) tested positive for HIV in the South Island, 19 persons (26%) in the Central Island and 6 persons (8%) in the North Island. A further 36 individuals in VIHA may have been infected during the year, but are unaware of their infection.

Across VIHA, almost twice as many men (46 or 64%) tested positive for HIV as women (26 or 36%). However, a decade ago, women represented only 18% of new HIV infections in VIHA, compared to 36% today. In BC in 2004, women accounted for 25% of newly reported cases.

The largest concentration of newly identified infections occurred in the 30-39 age group (26 or 36%), followed closely by the 40-49 age group (22 or 31%) and 50+ age group (15 or 21%). In BC in 2004, the most new HIV infections occurred in the 40-49 age group (33%), followed by the 30-39 age group (31%) and then by the 20-29 age group (17%) and the 50+ age group (16%).

The higher proportion of 50+ individuals becoming newly infected with HIV in VIHA, compared to BC overall, may be potentially worrisome. However, further analysis of the age structure of the population in VIHA and in BC is required to determine if HIV is spreading more rapidly among certain age groups within VIHA. Analysis is also required to determine which 50+ populations in VIHA are most affected.

For example, if older gay men comprise most of this age group it may suggest lack of access to proportionate efforts (compared to those targeting younger gay men) to change knowledge, attitudes and behaviour. If older IDUs account for most of the over 50 new infections, it may suggest lack of access to harm reduction supplies and education. If there is an increase in new HIV infections among women over 50, it may suggest lack of knowledge about safer sex, especially among heterosexual women who had previously been in long term, monogamous relationships.

Injection drug users (IDU) accounted for most of the newly identified HIV infections in VIHA (32 or 44%), followed by heterosexuals (15 or 21%), and gay men and other MSM (14 or 19%). By comparison, at the provincial level, gay men and MSM accounted for 38% of new HIV infections in 2004, while IDUs accounted for 27%, and heterosexuals comprised 14% of new cases.

This suggests that HIV may be spreading more rapidly among IDUs and heterosexuals in VIHA than in BC overall, while transmission may be lower among gay men and MSM in VIHA. However, as noted above, further analysis of the size of the IDU and MSM communities is required to determine if HIV is in fact spreading more rapidly among these populations.

First Nations and people of Aboriginal ancestry accounted for 13% (9) new HIV infections in VIHA. While this is consistent with the proportion of new HIV cases among Aboriginal British Columbians in 2004, it is still unacceptably high for VIHA as Aboriginal people comprise less than 5% of the total population.

Hepatitis C

In 2004, **594** people tested positive for hepatitis C (HCV) in VIHA, compared to 3035 in BC. Of the 594 new HCV cases, 326 persons (55%) tested positive in the South Island, 201 persons (34%) in the Central Island and 67 persons (11%) in the North Island.

Over twice as many men (398 or 67%) tested positive for HCV as women (196 or 33%). In each health service delivery area, the largest concentration of new cases was in the 40-49 age group (223 or 37%), followed by the 50+ age group (188 or 32%) and 30-39 age group (106 or 18%).

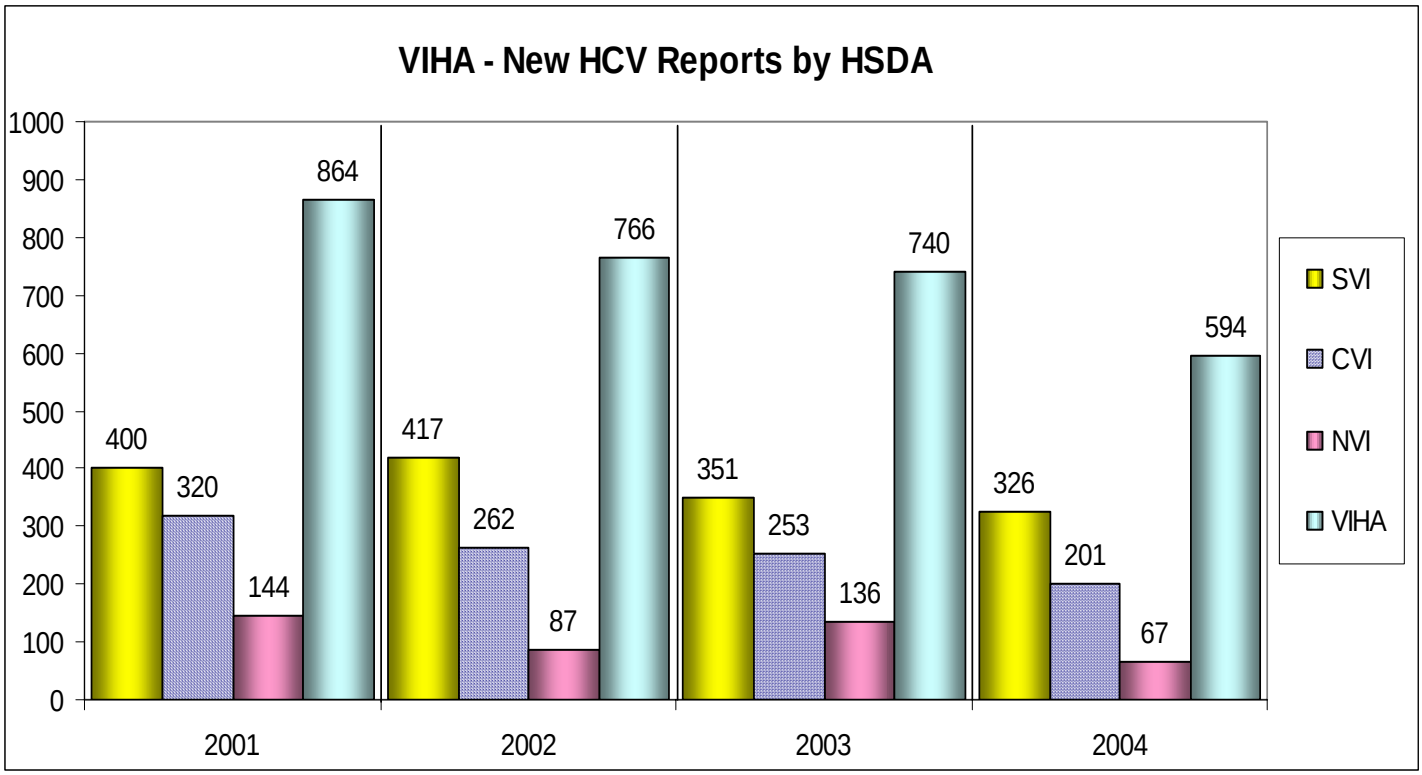


Figure 5: VIHA - Number of New HCV Reports, 2001 - 2004
Source: BCCDC, Annual Summary of Reportable Diseases 2003, plus unpublished data for 2004

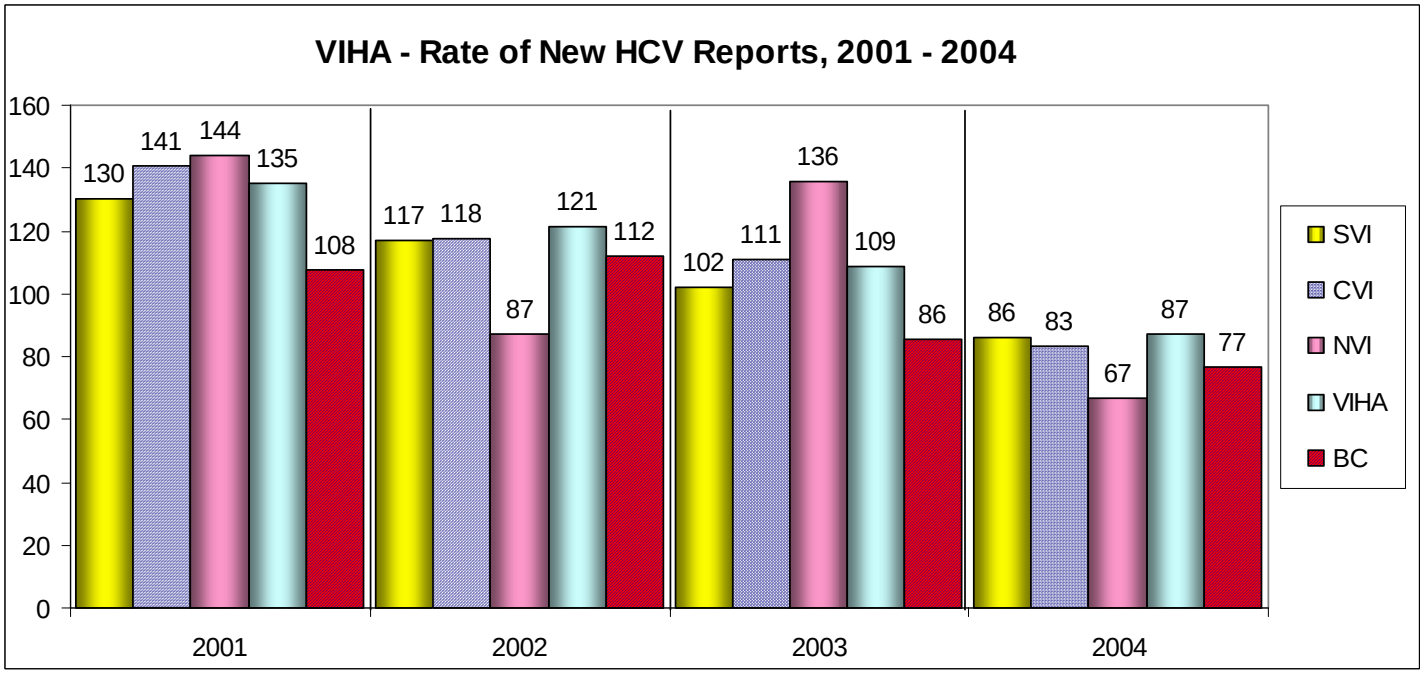


Figure 6: VIHA - Rate per 100,000 Population of New HCV Reports, 2001 - 2004
Source: Population data from BC Stats, BC Ministry of Management Services, and from Health Data Warehouse, BC Ministry of Health Services; Hepatitis C data from Integrated Public Health Information System (iPHIS). July 2005.

Ethnicity and risk factor data are not collected on newly identified HCV cases. However, targeted studies of people with chronic HCV indicate that between 75% and 90% self report injection drug use as a current risk factor. In a one time analysis of HCV cases by ethnicity in 2001, the BC Centre for Disease Control and BC Vital Statistics Agency found that 10% (88) of reported HCV cases in VIHA occurred among Aboriginal people registered as Status Indians. Of that number, 48% (42) were reported in the South Island, 31% (27) in the Central Island, and 22% (19) in the North Island.

Prevalence

True prevalence is the total number of people infected with HIV or HCV at a specified point in time. The prevalence rate is the total number of infections per 100,000 population at a specified point in time. Unless otherwise stated, the following prevalence estimates are the cumulative number of persons testing newly positive for HIV for the years 1989 to 2004, and the cumulative number of new reports of HCV for the years 1998 to 2004. Prevalence data does not include people who tested positive elsewhere and then moved to VIHA after their diagnosis. It does not include people who have died since testing positive, or people who are HIV and/or HCV positive but are unaware of their infection. The HCV prevalence data does not distinguish between new and chronic infections.

HIV/AIDS

The BC Centre for Excellence in HIV/AIDS estimates the total number of people living with HIV/AIDS in VIHA to be in the range of **976** to **1678,** compared to **8,000** to **13,000** people in BC (Hogg and Archibald, unpublished). A recent study found that more than one in every 100 Aboriginal persons in BC aged 15 years and over was living with HIV/ AIDS in 2001 (Hogg et al, 2005). In 2004, a study of the federal correctional system found that the prevalence of HIV is 10 times higher among prisoners than the general population of Canada (Moloughney, 2004). Comparative data are not available for the BC provincial correctional system.

Hepatitis C

In VIHA, **5936** HCV cases were reported between 1998 and 2004, compared to **32,195** in BC. Of the 5936 HCV reports, 48% (2840) occurred in the South Island, 36% (2134) in the Central Island, and 16% (962) in the North Island. In 2003, the I-Track Surveillance project in Victoria reported a 79% prevalence rate for HCV among local injection drug users. This is considerably higher than the self reported 53% HCV prevalence found by the Victoria “Missed Opportunities” Rapid Assessment Response and Evaluation (RARE) study in 2000. However, it is comparable to the 90% HCV prevalence rate among injection drug users reported by the Vancouver Injection Drug Users Study (VIDUS) in 2000. In the same 2004 study noted above, the prevalence of HCV is 23% higher among federal prisoners than the general population of Canada.

HIV and HCV Co-Infection

It is estimated that at any given time, 10 – 25% of people infected with HIV are co-infected with HCV. In 2003, approximately 13,000 people in BC were living with HIV, of which an estimated **3250** people were co-infected with HCV (BC Hepatitis Services, 2004). The numbers and rates of HIV and HCV co-infection are not yet available by health region or health service delivery area. However, in 2003, the I-Track Surveillance project reported 16% of injection drug users in Victoria were aware of being co-infected with HIV and HCV. Fully 100% of the HIV positive injections drug users were also infected with HCV, while 20% of the HCV positive IDUs were also infected with HIV.

Vision

The following vision is adapted from *Priorities for Action in Managing the Epidemics: HIV/AIDS in BC (2003 – 2007)*:

To make Vancouver Island a leader in British Columbia for effectively and responsibly managing the HIV/AIDS and hepatitis C epidemics

Managing the epidemics means:

- ✓ **Preventing** the further spread of HIV/AIDS and hepatitis C by focusing efforts on those groups of people who are at highest risk of infection
- ✓ **Providing appropriate care, treatment and support** to those already infected, regardless of where they live or their particular cultural needs
- ✓ **Building public awareness** and understanding through both research and efforts to share and disseminate new knowledge
- ✓ **Developing the capacity** to address the challenges presented by the epidemic at the community and regional level
- ✓ **Coordinating VIHA's efforts** and co-operating with other health authorities, provincial organizations and the British Columbia and Canadian governments

Values and Principles

The following values and principles form the ethical and practical basis for decision making and action. They were developed in consultation with people living with HIV/AIDS and hepatitis C, their advocates and community-based service providers. These values and principles are consistent with the VIHA Strategic Plan 2010:

Core Values

- Respect
- Dignity
- Human rights
- Trust
- Acceptance
- Compassion

Operating Principles

- Consumer and community directed
- Evidence based
- Gender sensitive
- Culturally competent
- Age appropriate
- Accessible
- Comprehensive and integrated
- Highly collaborative
- Locally delivered
- Regionally coordinated
- Provincially and federally aligned

Priority Populations

To be vulnerable in the context of HIV/AIDS means to have little or no control over one's risk of acquiring HIV infection or, for those already infected with or affected by HIV, to have little or no access to appropriate care and support. Vulnerability is the net result of the interplay among many factors, both personal (including biological) and societal; it can be increased by a range of cultural, demographic, legal, economic and political factors.

United Nations Joint Program on HIV/AIDS

The literature on HIV and HCV prevention indicates that best results are achieved through a combination of prevention, treatment and support efforts aimed simultaneously at the general population and at groups particularly vulnerable to HIV and HCV infection.

In BC, the number of new HIV infections continues to be highest among gay men, MSM and people who inject drugs. The proportion of newly identified cases is growing most rapidly among women, Aboriginal people and youth. For HCV, the number of new infections is highest among injection drug users. Based on data from five regional hepatitis pilot sites in BC, approximately 77% of all new HCV infections can be attributed to injection drug use (BC Hepatitis Services, 2004). Efforts to reduce HCV-related burden of illness must address the specific prevention, care and treatment needs of illicit drug users.

The VIHA strategy focuses on population groups that (1) have high concentrations of HIV and HCV relative to the general population; (2) are vulnerable to HIV and HCV infection due to social and economic disadvantage, substance dependence, mental illness, sexual exploitation, stigma and discrimination, incarceration and/or geographical isolation; (3) experience a differential burden of risk and disease and respond differently to prevention and treatment interventions on the basis of age, gender and culture; and (4) engage in behaviours that increase their risk of infection, such unsafe drug use and/or unsafe sexual practices. It is anticipated that each health service delivery area will prioritize these populations groups to reflect local service needs.

The population groups are:

- Injection drug users
- Gay men and other men who have sex with men
- Aboriginal people
- Women
- Youth
- Incarcerated persons
- Sexually exploited persons
- Persons with concurrent diagnoses (e.g. HIV, HCV, addictions and/or mental illness)

Within each population group, the strategy focuses on people who are ***at greatest risk*** of contracting HIV and HCV and people living with HIV and HCV who are ***least able*** to access care. For example, within the Aboriginal population emphasis may be on young Aboriginal women, and within the youth population emphasis may be on street-involved and/or sexually exploited youth. Within the concurrent diagnosed population, emphasis may be on those who inject drugs. As more resources become available this focus will expand to include those at moderate risk within each population group.

VIHA will continue to engage HIV and HCV positive people from the various population groups in developing, implementing and evaluating prevention, treatment and support services to ensure they are relevant and culturally appropriate.

Key Concepts

Closing the Gap combines a continuum of services approach to HIV and HCV with several health planning perspectives. The continuum of services includes prevention, care and treatment, and support. The health planning perspectives are population health, health promotion, harm and stigma reduction, community development, integrated mental health and addictions care and chronic disease management.

By examining the same range of services from different perspectives, it is possible to develop a comprehensive and integrated response to HIV and HCV. Each perspective looks at vulnerability to infection and disease management differently, but all perspectives reinforce each other.

Population Health

Population health looks at how individual characteristics and broader social and economic factors combine to influence the health of groups of people. It focuses on the health of the general population and the health of specific population sub-groups, such as Aboriginal people. The term "determinants of health" is a label given to the social, economic, genetic, behavioural, developmental and environmental factors and conditions, over which individuals have limited direct control, and which are thought to have an influence on health. The determinants of health go beyond lifestyle practice to influence individual and collective behaviour. It is the complex interactions among all these factors that have the most profound impact on health.

The determinants of health can be organized into four broad categories:

- Living and working conditions – income, social status, social support, education, employment, working conditions and physical environments, such as housing

- Individual capacities and skills – personal health practices, coping skills, healthy child and youth development, and biology and genetic endowment

- Social environments – values, norms, attitudes, gender and culture, as well as to specific contexts such as family, school, workplace and systems of care

- Access to services – equitable access to services that maintain and promote health, prevent diseases, and restore health and function

Population health analysis has increased awareness of the need for services to be gender responsive and culturally relevant. Gender refers to the array of roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to people based on sex. Culture as a determinant of health recognizes that some people face additional health risks due dominant cultural values that perpetuate marginalization, stigma and discrimination, and the devaluation of cultural perspectives on health and well-being.

Health Promotion

Health promotion looks at the role of individual lifestyle, supportive environments and community participation in HIV/HCV vulnerability and disease management. It recognizes the importance of increasing people's sense of control over their own health at the individual, family and community level. Health promotion fosters the knowledge, skills, attitudinal changes and support needed to help people engage in safer and healthier lifestyles. It seeks to create conditions that make the healthy choice the easy choice.

Health promotion emphasizes societal change and supports an active role for the public setting priorities, making decisions, planning strategies and implementation. Health promotion involves five inter-related actions: building healthy public policy, creating supportive environments, strengthening community action, developing personal health and coping skills, and re-orienting health services beyond an exclusive focus on treatment (Every Door, 2004).

Mental health promotion is an important subset of health promotion. Mental health is described by the World Health Organization as "a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO 2001a). In this sense, mental health implies fitness rather than freedom from illness. It is the foundation of well being and effective functioning for both individuals and communities. The twin aims of improving mental health and lowering the personal and social costs of mental illness are best achieved through a public health approach.

Harm Reduction

Harm reduction looks at the role of addictions and other risk behaviours in HIV/HCV vulnerability and disease management. It recognizes the importance of preventing and reducing the harms associated with such issues as substance use, sexual risk behaviour, sexual exploitation (e.g. survival sex) and street entrenchment--without requiring abstinence. It acknowledges the ethical imperative to help keep people as safe and healthy as possible in the context of active risk taking behaviour, while respecting the notions of individual autonomy and informed choice.

The fact or extent of an individual's drug use is secondary to the harms from drug use. The priority is to decrease the negative consequences of drug use to the user and others, rather than decrease drug use itself. While harm reduction emphasizes a change to safer practices and patterns of drug use, it does not rule out the longer-term goal of abstinence. In this way, harm reduction is complementary to the abstinence model of addiction treatment.

Harm reduction recognizes that people with drug use problems benefit from a variety of different approaches. There is no one prevention or treatment approach that works reliably for everyone. It is choice and prompt access to a broad range of interventions that helps keep people alive and safe. Harm reduction establishes a hierarchy of achievable steps that taken one at a time can lead to a fuller, healthier life for drug users and a safer, healthier community. It starts with "where the person is" in their drug use, with the immediate focus on the most pressing needs.

Examples of harm reduction-based HIV/ HCV prevention services are condom distribution, needle exchange, and safer sex and safer drug use counselling. Harm reduction-based treatment services include simplified antiretroviral therapies, low threshold methadone maintenance and medical prescription of heroin. Supportive housing and employment for actively using HIV positive injection drug users are examples of harm reduction-based support services.

Stigma Reduction

Although Canadians have become more accepting of people with HIV and HCV, stigma and discrimination still exist. These attitudes can isolate people with HIV and HCV and make it harder for them to live well with their condition. Stigma and discrimination can have an adverse effect on people's willingness to be tested and seek treatment. They can also lead to violations of the human rights of people with HIV and HCV, including unlawful discrimination in housing, employment and access to health and social services.

One of the ways to reduce stigma and discrimination is a commitment to social justice. Policies and programs based on a social justice approach recognize the dignity and worth of each person. They value individual and cultural differences and diversity. They strive to ensure people are treated fairly and have equitable access to the social and economic opportunities that support health and to evidence-based health services. They encourage participation by all, including the most disadvantaged (Leading Together, 2003).

Community Development

Community development seeks to equip communities with the resources, skills and systems to solve problems and take control of their own health and well being. It is a process that strengthens the capacity of individuals, organizations, networks and the broader community to develop meaningful and sustainable responses to HIV and HCV. In the area of prevention, community development seeks to change risk behaviour and the structural issues that support and maintain the behaviour. Comprehensive community development combines health promotion messages with structural policy change. It involves a wide range of stakeholders who systematically implement complementary interventions.

There is a growing awareness of how environmental and social conditions contribute to HIV/ HCV vulnerability. Programs with the greatest promise rely on community action to achieve lasting change, seek to empower the community through involvement in decision making, are comprehensive in terms of strategies and targets, draw upon population health and health promotion models to identify factors other than the individual as causing problems, and use the best available research to guide interventions.

Integrated Mental Health and Addictions Care[1]

Individuals with co-occurring psychiatric and substance disorders (or dual diagnosis) are recognized as a population with poorer health outcomes and higher health care costs. They are commonly “system misfits”, who are poorly served in both mental health and addiction treatment settings. This has led to the over utilization of resources in the criminal justice, primary health care, homeless shelter, and child protection systems. The prevalence of people with both a mental illness and drug dependence makes them an expectation, rather than an exception in service design and delivery.

In order to provide better service to dual diagnosed individuals, VIHA has adopted the Comprehensive, Continuous, Integrated System of Care (CCISC) which will inform all mental health and addictions services. The goal is to develop core and enhanced dual diagnosis capability in both service areas.

This model is based on best practice principles for integrated clinical treatment:

1. The core of treatment success is the availability of empathic, hopeful treatment relationships that provide integrated treatment, coordination of care, and continuity of care.

2. A comprehensive system of care has a range of programs that balance care and case management with empathic detachment, confrontation, contracting, and opportunity for learning.

[1] The following description has been adapted from the VIHA Co-Occurring Psychiatric and Substance Disorders Charter and Consensus Document (2003)

3. Mental illness and substance dependence are both examples of chronic, bio-psychosocial disorders that can be understood using a disease and recovery model. Treatment for both disorders is matched to diagnosis, phase of recovery, and stage of change. Appropriate matching occurs at any level of care.

4. There is no one correct dual diagnosis intervention. For each individual, the proper treatment is matched to client need. All programs have minimum dual diagnosis capability.

5. Client outcomes must be tailored to the individual, including harm reduction, movement through stages of change, changes in type, frequency and amounts of substance use or psychiatric symptoms, improvement in disease management skills and treatment adherence.

Chronic Disease Management

Health concerns are usually classified as either acute or chronic. Acute illnesses most often begin abruptly and last only a short time. Most people with an acute illness can expect to return to normal health. Chronic diseases usually develop slowly, last long periods of time and are often never cured. For many chronic diseases, there is no cure-- as in the case of HIV. The long term effects of a chronic illness may be difficult to predict. Some conditions cause few problems. Others cause episodic problems or symptoms that can be controlled with medication. In some cases, however, a chronic disease may severely limit a person's ability to work, attend school, participate in social activities, live independently or take care of routine needs.
Chronic disease management is an approach to health care that emphasizes helping individuals to maintain independence and to keep as health as possible through prevention, early detection and management of chronic conditions, such as HIV and hepatitis C. Chronic conditions impose challenges for those affected, their families and care providers. A person's ability to follow medical advice, accommodate lifestyle changes and access resources are all factors that influence successful management of an ongoing illness.

VIHA's expanded chronic care model includes health promotion and disease prevention. The key components are the community, health system, self management support, delivery system design, decision support and clinical information systems. Strategies and elements for improving care for people with chronic diseases and renewing clinical practice include the development of evidence-based practice guidelines, shared care arrangements that link general practitioners with specialists, self management training and support, and web based access for patients and practitioners to information and tools to support them in managing chronic conditions.

Prevention

For several decades it has been common to classify health interventions into primary, secondary and tertiary prevention. Primary prevention aims to prevent HIV acquisition and prevent secondary transmission from HIV positive individuals to others through the adoption and maintenance of HIV risk reduction behaviours. Secondary prevention seeks to prevent or delay the progression of HIV infection to disease and disability, including AIDS and opportunistic infections, through prevention, prophylaxis, treatment and support services. Tertiary prevention strives to ameliorate disease severity, prevent disability, enhance quality of life and prevent mortality from HIV or AIDS.

An alternative conceptualization of prevention is based on the level of risk of disorder in various groups. Universal interventions are targeted at whole populations at low to average risk. Selective interventions target groups at increased average risk. Indicated interventions target those

individuals with early emerging problems. For the purposes of this report, the term “targeted intervention” refers to a combination of selective and indicated interventions

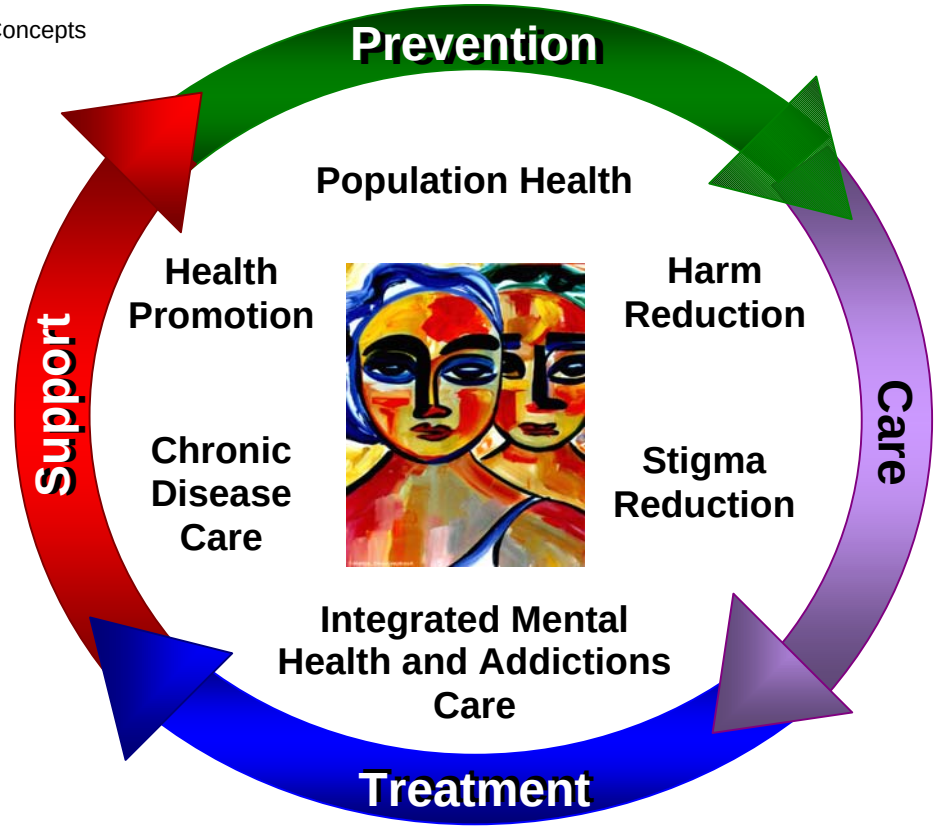
Universal interventions is to inform the general public about HIV/ HCV, personal practices that place people at risk for acquiring HIV/HCV and safer sex and safer drug use. This information must be age-appropriate, accessible, culturally relevant and available over the life course. Targeted interventions address specific risk factors leading to HIV and HCV infection in identifiable groups. Risk factors are social, environmental and individual factors that increase an individual’s probability of acquiring HIV or HCV infection. For example, prevention among injection drug users must address the daily challenges of chronic dependence. The overwhelming need for drugs will hamper most well intentioned efforts to practice safer drug use and safer sex.

Targeted interventions also seek to reduce the harms from unsafe sex and unsafe drug use among people infected with HIV/ HCV, and to maintain the health of HIV/ HCV positive people at optimum levels. These interventions, often referred to as “positive prevention”, engage people who are living with HIV/ HCV in the design, planning and delivery of prevention services. It is based on the notion that every new case of HIV and HCV infection or re-infection is acquired from someone who is already infected and not practicing safer sex or safer drug use.

Care, Treatment and Support

Care and treatment refers to primary care, addictions services, HIV/ HCV primary and specialist care, drug treatment, acute care, supported self care, home and community care, and end of life care. While these services are intended to slow disease progression and improve quality of life for people living with HIV and HCV, consistent access to primary care and low threshold addiction services for vulnerable populations also prevents new infections. Support refers to the provision of a wide range of information, advocacy and support services by consumer and community-based organizations to people living with HIV/ HCV and to those at risk for infection.

Figure 7: Key Concepts



VIHA Integrated HIV and HCV Strategy - Logic Model

Activities

Core Services
- Prevention
- Care & Treatment
- Support

Core Functions
- Surveillance
- Drug Treatment
- Clinical and laboratory support
- Complex patient care
- Knowledge exchange
- Research and evaluation
- Inter-professional education
- Advocacy and policy change

Outputs

- Evidence based continuum of HIV/HCV and related services
- Sustainable HIV/HCV service delivery infrastructure

Outcomes

- Reduced incidence of HIV/HCV infection
- Increased proportion of HIV/HCV+ individuals linked to appropriate services
- Slower disease progression for people living with HIV/HCV
- Increased quality of life for people living with HIV/HCV
- Increased capacity to anticipate and respond to emerging HIV/HCV trends, affected populations and service needs

Approaches

- Health promotion
- Population health
- Harm reduction
- Stigma reduction
- Community development
- Integrated mental health and addictions care
- Chronic disease management

Strategy

Target individuals *most at-risk of infection* and *least able to access care* once infected within priority populations

Priority Populations

- Injection drug users
- Gay men
- Men who have sex with men
- Aboriginal people
- Women
- Youth
- Incarcerated persons
- Sexually exploited persons
- Persons with concurrent diagnoses

Figure 8: VIHA Integrated HIV and HCV Strategy Logic Model

Comprehensive Continuum of Services

VIHA currently provides a continuum of HIV and HCV services across the health authority. Figure 10 outlines the core prevention, care, treatment and support services proposed for each HSDA. While these services may appear in the table as stand-alone services, they are in fact highly inter-related. It is the combination of services that will have the most profound impact on health. The core services are, in turn, supported by the core functions of surveillance, drug treatment, clinical and laboratory support, complex patient care, research and evaluation, inter-professional education, knowledge transfer, advocacy and policy change.

VIHA is assisted in carrying out the core functions by the following organizations:

- BC Centre for Disease Control
- BC Centre for Excellence in HIV/AIDS
- Oak Tree Clinic
- BC Persons with HIV/AIDS Society
- Positive Women's Network
- Healing Our Spirit BC Aboriginal HIV/AIDS Society
- Red Road HIV/AIDS Network

The VIHA continuum of services is provided by a mix of community, institutional and independent service providers, including HIV/ HCV consumer and service organizations, allied community organizations, Aboriginal service providers, VIHA direct services and physicians. Some community service providers are specifically mandated to provide HIV and/or HCV services. Others have different organizational mandates but offer dedicated HIV/ HCV programs. Some service providers, faced with an increasingly at-risk or HIV/ HCV positive client population, have partnered with HIV/ HCV-specific organizations to provide appropriate services to their clients.

The VIHA continuum of services is informed by a clear understanding of the natural history of HIV, with the recognition that HCV shares a number of important similarities and differences. The key difference between HIV and HCV is that up to 25% of HCV infected individuals will clear the infection spontaneously. Of those who develop chronic HCV infection, 50% - 80% can achieve a sustained viral response depending on the HCV genotype, access to and tolerance of drug treatment. HIV/ HCV co-infection, however, will result in greater severity of symptoms and more rapid progression to end-stage liver disease.

Goldstone et al (2006) have linked the provision of prevention, care, treatment and support services to the natural history of HIV and linked HIV disease progression to the trajectory of chronic illness (see Figure 9). This trajectory starts with factors and conditions that contribute to HIV vulnerability and place an individual or community at risk of infection. It continues with diagnosis, follow-up and the first appearance of noticeable symptoms. The trajectory continues with a lengthy period of relative stability where symptoms and disease progression are under control. Illness is self managed and care takes place in the home and community.

A period of instability begins when the disease is reactivated and symptoms become difficult to control. At this point, adjustments are made in the treatment regimen and the illness is managed with support at home or in the community. In the acute phase, severe and unrelieved symptoms occur, as well as AIDS-defining illnesses, opportunistic infections and complications. Hospitalization is required to bring the disease under control. During this time, there is often a gradual return to an acceptable way of living within the limits imposed by disability or illness. In the downward stages of the disease, there is a rapid or gradual physical decline accompanied by increasing disability and difficulty controlling symptoms. The final days or weeks before death are characterized by the shutting down of body processes, relinquishment of everyday life interest and activities, and disengagement and closure.

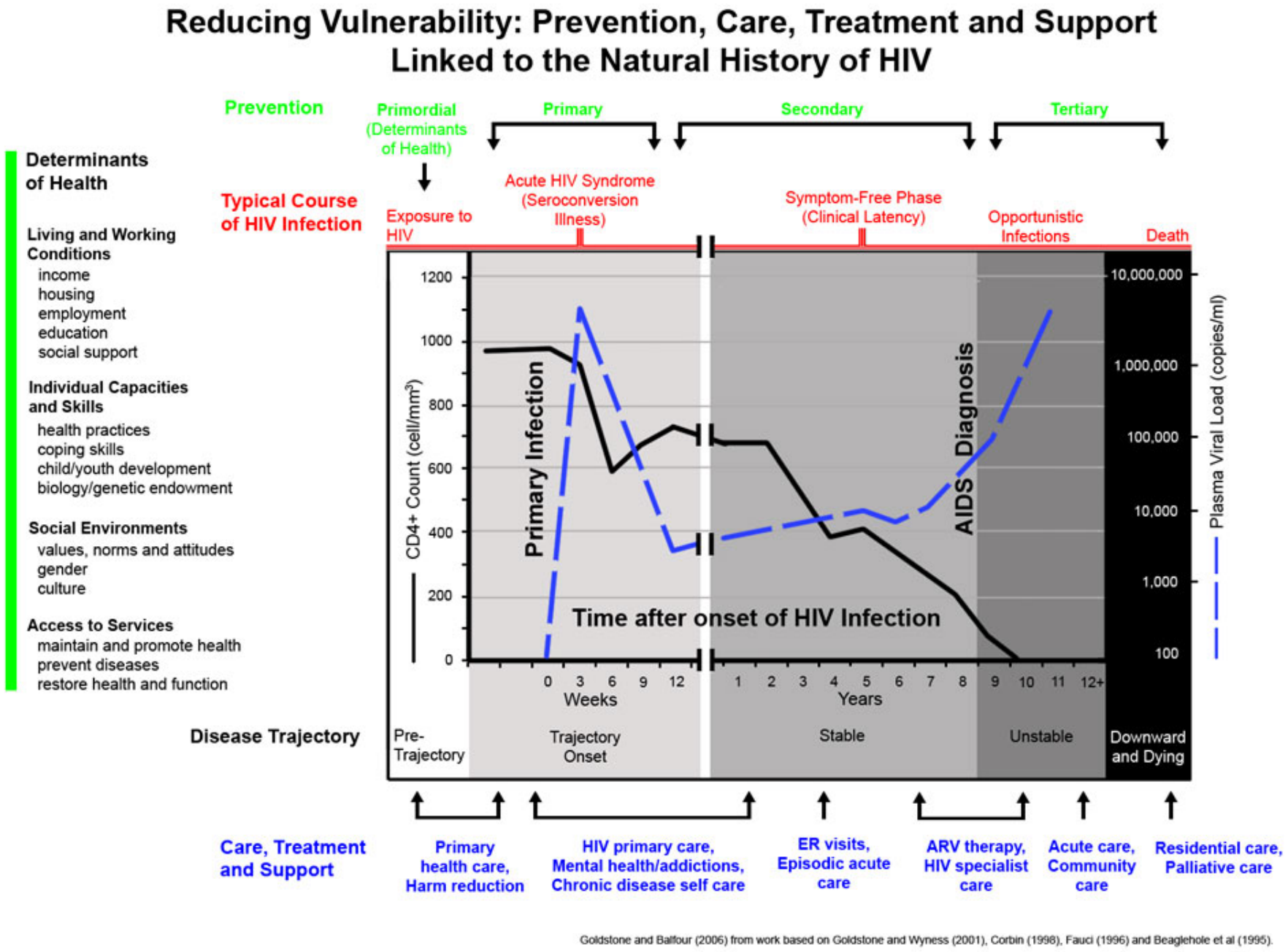


Figure 9: Reducing Vulnerability: Prevention, Care, Treatment and Support Linked to the Natural History of HIV

VIHA Integrated HIV and HCV Continuum of Services

The following continuum of core prevention, treatment and support services has been proposed for each health service delivery area on Vancouver Island. VIHA will ensure appropriate referral and support systems are in place to facilitate access to services provided by provincial agencies. Please note, not all services will be available in every community.

<table>
<tr><th colspan="3">Core Services</th></tr>
<tr><th>Prevention</th><th>Care and Treatment</th><th>Support</th></tr>
<tr>
<td>

Outreach and assessment
Provision of free condoms
Provision of free clean needles, injection equipment, other harm reduction supplies
Recovery and safe disposal of used needles and injection equipment
Testing with pre/post test counselling and follow-up for STI, HIV, HCV; integrated with TB control, reproductive health and universal immunization programs
Contact tracing and follow-up
Active referral to ancillary services: health (e.g. primary care, HIV/ HCV treatment, mental health and addictions), housing, food support, income assistance, employment, family support, legal services
Prevention case management
HIV/HCV information and education
Safer sex and safer drug use information, education and counselling
Sexual and reproductive health information, education and counselling
General health information, education and counselling
Individual advocacy
Peer, family and community support

</td>
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Comprehensive primary health care

Community physicians
Nursing clinical care
Street outreach nursing
Community and hospital clinics
Mobile health teams

HIV/ HCV specific care

Primary and specialty care
Antiretroviral outreach
Acute care
Community care
Residential care
End of life care

Multi-threshold mental health and addiction services

Centralized access
Assertive case management
Sobering and assessment centres
Expanded withdrawal management
Supportive recovery
Relapse prevention
Residential treatment
Outpatient treatment
Methadone maintenance
Supportive housing
R&D of innovative harm reduction service models: supervised consumption and heroin prescription

</td>
<td>

Supported self care for persons living with HIV/ HCV

Treatment information
Medication management
Nutritional support and counselling
Chronic illness self care support, including wellness
Individual advocacy
Peer, family and community support

Housing

Support to access and maintain housing
Collaborative action to increase availability of supportive housing for people at risk for/living with HIV/ HCV

</td>
</tr>
<tr><th colspan="3">Core Functions</th></tr>
<tr>
<td colspan="3">

Surveillance
Drug treatment
Laboratory and clinical support
Complex patient care
Research and evaluation
Inter-professional education
Knowledge exchange
Systemic advocacy and policy change

</td>
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</table>

Figure 10: VIHA Integrated HIV and HCV Continuum of Services

Goals, Strategies and Targets

Goal #1: Prevention

50% reduction in the number of newly reported HIV and HCV infections on Vancouver Island by 2008/09

The following strategies address the core prevention services identified in the VIHA HIV and HCV Continuum of Services. Please note: the prevention strategies involve reconfiguring the content and delivery of the core prevention services to meet the respective needs of the general population (universal intervention), at risk communities (targeted intervention) and people living with HIV and/or HCV ("positive" prevention).

Strategies:

1. Universal Interventions

What: Universal interventions are aimed at the general population at low risk of HIV and HCV infection. Interventions are age, gender and culturally appropriate and available across the life course.

Why: HIV and HCV are preventable diseases. Every effort should be made to ensure people have the information, skills and support to prevent the spread of HIV and HCV. This includes access to information about HIV and HCV transmission and safer sex practices, skills to negotiate safer sex and make healthier sexual decisions, and access to male and female condoms.

Knowledge levels about the risks of HIV and how HIV is transmitted remain high. It appears that people are not acting on that information. The reasons people continue to be at risk are complex and relate to the underlying causes of HIV and HCV, including lack of social support or sense of community, marginalization, stigma and discrimination, powerlessness in relationships, and the presence of other health issues that may interfere with their ability to protect themselves, such as addiction, depression or other mental illnesses.

HIV prevention efforts have traditionally focused on individual behaviour change strategies. However, individual strategies have the greatest impact when they are part of a larger response that engages families, care providers, schools, work places and communities. The key to effective prevention is to create supportive environments that help people develop the confidence and skills to make safer choices. This will require raising public awareness and support, collaborating with other sectors to address the determinants of health, and optimizing the voice and involvement of populations at risk of HIV and HCV infection (Leading Together, 2003).

Two important contexts for universal interventions are the school system and primary health care system. At present there appears to be ample age-appropriate curricula to address HIV prevention among youth. However, the delivery of HIV education is generally dependent upon the commitment of individual parents, schools and educators, and is often influenced by beliefs about sexuality rather than health and safety. Intersectoral collaboration is required to move beyond incremental gains to achieve system wide change in the education system.

VIHA has a unique role to play in prevention through the primary care interface. HIV is spread through the same risk behaviours that result in unintended pregnancy and sexually transmissible infections (STI). VIHA has the opportunity to incorporate information, counselling and testing for

HIV, HCV and STI into its primary care approaches to sexual and reproductive health and support for healthy living.

How: Ensure the following range of services are provided in each HSDA in collaboration with consumers, community service providers and partners in health, education, social services and other relevant sectors.

- Provision of free condoms and other harm reduction supplies
- Testing with pre/post test counselling and follow-up for STI, HIV and HCV; fully integrated with TB control, reproductive health and universal immunization programs
- Contact tracing and follow-up
- HIV and HCV information, education and counselling
- Safer sex and safer drug use information, education and counselling
- Sexual and reproductive health information, education and counselling
- General health information, education and counselling
- Peer, family and community support

2. Targeted Interventions

What: Targeted interventions are aimed at selected population groups with higher than average risk of infection and who experience an increased burden of disease due to age, gender, culture, vulnerability and risk behaviour.

Why: The reasons that some people are at higher risk of HIV and/or HCV infection than others are complex. The underlying factors that contribute to vulnerability are social and economic in nature. They relate to lack of social support or a sense of community, marginalization, stigma and discrimination, lack of self esteem, powerlessness in relationships, and the presence of other health issues that may interfere with their ability to protect themselves, such as addiction or mental illness. Prevention initiatives must address both individual risk and social determinants of health (BC Ministry of Health Services, *Priorities for Action*, 2003).

Targeted interventions require an understanding of sub-group culture and norms, including power relationships and the context of sexuality and addictions within groups. For example, women who are most at risk for HIV and HCV infection, such as young Aboriginal women, may not have the knowledge, resources or power within their relationships to protect themselves from infection. More gay men are being diagnosed with other sexually transmitted diseases, such as syphilis, than in the past. This may indicate that gay men are engaging in riskier sexual behaviours or highlight the lack of investment in prevention programs targeted to gay men in recent years. It may also indicate a need for new approaches to help understand the social and cultural factors that affect gay men and help them to sustain healthy behaviours over time. Prevention programs targeted to the gay community will need to address issues of homophobia and heterosexism.

Efforts to manage the epidemic in the Aboriginal community will require special measures that acknowledge both the movement of people between reserve and urban communities, and the relationship between the First Nations and the Government of Canada. More importantly, these efforts must recognize the impact of racism on the HIV epidemic in Aboriginal communities. Forced assimilation, residential schools and loss of culture have contributed to conditions that make Aboriginal people more vulnerable to HIV and HCV infection. These conditions include poverty, unemployment and multigenerational violence, sexual abuse and substance abuse (Leading Together, 2003).

HIV prevention efforts have typically not drawn upon the traditional values of Aboriginal people or the richness of the Elders' teachings. Many Aboriginal people believe that spiritual malaise and lack of connection to their own culture and language influence vulnerability, risk of HIV infection and prevent those living with HIV from achieving their full potential.

The Cowichan HIV/AIDS Initiative has successfully engaged Aboriginal people in HIV/ HCV prevention, treatment and support, regardless of status or whether they live on or off reserve. By following the lead of HIV positive community members, their families and Elders, the partner organizations have designed a culturally meaningful continuum of HIV services for the Cowichan Tribes and surrounding Aboriginal communities in Central Vancouver Island.

Targeted interventions in correctional settings will need to address the harms from substance use. Established harm reduction policies in Canadian and British Columbian prisons include the provision of bleach to inmates for sterilizing injection equipment and the provision of methadone maintenance treatment for heroin dependent inmates and parolees. An international review of prison-based needle exchange programs concluded that they significantly reduce risky injection practices and blood-borne disease transmission (Lines et al., 2004). At present, no correctional jurisdiction in Canada provides sterile injection equipment to inmates.

How: Ensure the following range of services are provided in each HSDA in collaboration with consumers, community service providers and partners in health, education, social services, law enforcement, corrections and other relevant sectors.

The content and delivery of these services must be tailored to meet the needs of those who are *most at risk for HIV and HCV infection* within the following populations: injection drug users, gay men, MSM, Aboriginal people, youth, women, incarcerated persons, sexually exploited persons and persons with concurrent diagnoses. (Bold highlighted services are in addition to the core services listed under Universal Interventions; see above.)

- **Outreach and assessment**
- Provision of free condoms and other harm reduction supplies
- Testing with pre/post test counselling and follow-up for STI, HIV and HCV
- **HBV vaccination for injection drug users**
- Contact tracing and follow-up
- **Active referral to services: health (e.g. primary care, HIV/ HCV treatment, mental health and addictions), housing, food support, income assistance, employment, family support, legal services**
- Prevention case management
- HIV and HCV information, education and counselling
- Safer sex and safer drug use information, education and counselling
- Sexual and reproductive health information, education and counselling
- General health information, education and counselling
- **Individual advocacy**
- Peer, family and community support

3. "Positive" Prevention

What: Targeted interventions aimed at people living with HIV and/or HCV.

Why: Every new HIV and HCV infection is the result of one positive person and one negative person engaging in risk behaviour. There is a growing trend among people living with HIV and HCV to be leaders in prevention and to actively promote safer sex and safer drug use. This is driven by the desire to prevent transmission and both co-infection and re-infection (in the case of HIV, the latter can lead to the development of new, drug resistant strains of HIV). There is also the legal responsibility in Canada for HIV positive individuals to inform their sexual partners about their HIV status before engaging in unprotected sex.

People living with HIV and HCV have played a vital role in establishing community-based programs and services, influencing polices and advocating for research and treatments. The meaningful participation of those most affected by HIV and HCV in planning, service delivery and evaluation offers two distinct benefits: it gives the health and social service system a valuable source of advice, knowledge and experience, and it gives those participating access to social support--one of the key determinants of health.

"Positive" prevention initiatives are based on the principles of health promotion. They focus on promoting the physical, mental and sexual health of people living with HIV and HCV. Once their health is stabilized and they have access appropriate supports to maintain life-long behaviour change, HIV and HCV positive individuals are empowered to be actively involved in prevention.

How: Ensure the following range of services are provided in each HSDA in collaboration with people living with HIV and/or HCV, community service providers and partners in health, education, social services, law enforcement, corrections and other relevant sectors.

The content and delivery of these services must be tailored to meet the needs of HIV/ HCV positive individuals who are *least able to access appropriate care, treatment and support* within the following populations: injection drug users, gay men, MSM, Aboriginal people, youth, women, incarcerated persons, sexually exploited persons and persons with concurrent diagnoses. (Bold highlighted services are in addition to the core services listed under Targeted Interventions; see above.)

- Outreach and assessment
- Provision of free condoms and other harm reduction supplies
- Testing with pre/post test counselling and follow-up for STI, HIV and HCV
- Contact tracing and follow-up
- Active referral to services: health (e.g. primary care, HIV/ HCV treatment, mental health and addictions), housing, income assistance, food support, family support, legal services
- Prevention case management
- **Treatment information and medication management**
- **HIV/ HCV nutritional support and counselling**
- **Chronic illness self care support, including wellness**
- Safer sex and safer drug use information, education and counselling
- Sexual and reproductive health information, education and counselling
- General health information, education and counseling
- Individual advocacy
- Peer, family and community support

4. Comprehensive Needle Exchange

What: Distribution of sterile syringes and the recovery of used syringes to reduce risk behaviour (needle sharing) and HIV and HCV incidence among active drug users. Needle exchanges limit the amount of time that a needle spends in circulation, acting as a form of vector control for transmission. Key elements of needle exchange are supplies distribution, education, referral and advocacy (BC Harm Reduction Supply Services Policy, 2004).

Why: Sharing needles is a frequent mode of HIV and HCV transmission. In Canada, injection drug use is currently the single most important route of HCV transmission. Needle exchange programs (NEP) have been conclusively demonstrated to reduce the risks of contracting HIV and HCV. NEPs serve as a collection point for used needles and can minimize the number of publicly discarded needles. NEPs also serve as an entry point for drug users to access critical health and social services. Best results are achieved with good access to sterile needles and other injection equipment through a variety of sources, provision of information and counselling to support safer injection practices, and referral to health care services (MoH, 2005).

Under the *BC Harm Reduction Supply Services Policy* (2004), health authorities, contracted agencies and community partners are expected "to strive to eliminate needle and syringe sharing and promote the use of a new needle for each injection". The policy guidelines state that access to clean needles and other injection equipment should extend to whoever needs them regardless of age, drug using status, drug of choice, or residence. Needle exchange services should also strive to distribute as many supplies as required to meet an individual's particular needs, including the provision of supplies for the purposes of secondary distribution. The guidelines also call for the formulation of community plans for needle disposal, including community education, provision of sharps containers in supervised settings, pick up of discarded needles from streets, schools, parks and alleys, as well as the provision of personal sharps containers to drug users.

How: Ensure the following range of services is provided in each HSDA in collaboration with drug users, community service providers, local government and partners in health, education, social services, law enforcement, corrections and other relevant sectors. Needle exchange services should be closely integrated with targeted prevention interventions for at risk communities and for people living with HIV/ HCV. (Bold highlighted services are in addition to the core services listed under Targeted Interventions and Positive Prevention; see above.)

- **Provision of free clean needles, injection equipment and harm reduction supplies**
- **Recovery and safe disposal of used needles and other injection equipment, including improperly discarded drug paraphernalia**
- Testing with pre/post test counselling and follow-up for STI, HIV and HCV
- HBV vaccinations for injection drug users
- Active referral to services: health (e.g. primary care, HIV/ HCV treatment, mental health and addictions), housing, income assistance, food support, family support, legal services
- Practical support and accompaniment
- HIV and HCV information, education and counselling
- Safer drug use and safer sex information, education and counselling
- Sexual and reproductive health information, education and counselling
- General health information, education and counselling
- Individual advocacy
- Peer, family and community support

To achieve optimal distribution of clean needles and safe recovery and disposal of used needles, a variety of venues, partners and coordinated strategies will be needed. These may include the combination of fixed site, mobile and peer-based exchange services, the co-location of health care and needle exchange services, and the development of community or regional syringe recovery and disposal initiatives with municipal and business sector partners. Note: to date, community-based needle exchange providers have not been specifically funded for the recovery and safe disposal of improperly discarded needles.

In Victoria, there are approximately 1500 injection drug users. There is one fixed site needle exchange, two mobile vans, one peer based exchange and a foot patrol/recovery service. In addition, street nurses and public health units distribute clean needles, as well as several downtown pharmacies. Approximately 900,000 clean needles are distributed annually in Victoria.

Free, clean needles for non-clinical purposes are accessed through 28 locations in VIHA. These service points include public health units, needle exchange operators and community organizations. Key communities currently receiving needle exchange services are listed below. The communities in italics receive only limited mobile services:

South Island	Victoria, *Langford, Sooke*
Central Island	*Duncan, Cowichan Valley*, Nanaimo, Port Alberni, Parksville/Qualicum
North Island	Courtenay, Comox, Campbell River, Port Hardy, *Alert Bay, Port McNeil, Port Alice*

Performance Measures: *Prevention*

Population Outcomes:

Performance Measures	Baseline 2004	Target							
		2006/07		2007/08		2008/09			
		30% reduction		40% reduction		50% reduction			
1. Number of persons testing newly positive for HIV	**VIHA**	**72**	**VIHA**	**50**	**VIHA**	**43**	**VIHA**	**36**	
	NI	6	NI	4	NI	4	NI	3	
	CI	19	CI	13	CI	11	CI	9	
	SI	47	SI	33	SI	28	SI	24	
2. Number of newly reported cases of HCV[2]	**VIHA**	**594**	**VIHA**	**416**	**VIHA**	**356**	**VIHA**	**297**	
	NI	67	NI	47	NI	40	NI	33	
	CI	201	CI	141	CI	121	CI	101	
	SI	326	SI	228	SI	196	SI	163	

Service Outcomes:

Measures, targets and sustainable data collection and analysis methods will be developed in partnership with service providers to collect data in the following domains for contracted services:

- Reach – e.g. extent to which priority populations are engaged in services
- Referrals – e.g. to primary health, mental health and addictions, HIV/HCV care (includes treatment and support)
- Knowledge – e.g. HIV/HCV transmission, disease progression, safer sex, safer drug use, safe needle disposal and principles of health re: sexual, reproductive and general health
- Skills – e.g. safer sex, safer drug use and decision making re: sexual, reproductive, general health
- Testing – e.g. HIV, HCV, STI
- Self Efficacy – e.g. perception of risk, confidence to practice safer sex and safer drug use
- Support – e.g. peer, family and community support

[2] Please note, at this time there are no BC targets for HCV prevention. The VIHA HCV prevention targets are recommendations only based on the provincial HIV targets.

Goal #2: Care, Treatment and Support

100% of people newly reported with HIV and HCV on Vancouver Island over next three years are linked to appropriate care, treatment and support

The following strategies address the core care, treatment and support services identified in the VIHA HIV and HCV Continuum of Services. Care and treatment services are outside the mandate of VIHA Population and Family Health and implementing these strategies will require significant collaboration with other VIHA service areas, disciplines, professions and institutions.

Strategies:

Care and Treatment

Ensure the following range of services is provided in each HSDA in collaboration with people living with HIV/HCV, physicians, VIHA community care and hospital services, BC Centre for Excellence in HIV/AIDS, BC Hepatitis Services, Oak Tree Clinic, allied health professionals and community partners. Emphasis is on engaging those *most at risk for HIV/HCV infection* and *least able to access appropriate care, treatment and support* once infected within the following populations: injection drug users, gay men, MSM, Aboriginal people, youth, women, incarcerated persons, sexually exploited persons and persons with concurrent diagnoses.

1. Primary Health Care

What: Primary health care is the range of services individuals and communities receive on a regular, ongoing basis in order to stay healthy, get better, manage with chronic illness or disease and cope with end of life. Services include health promotion, disease prevention, episodic care, chronic disease management, rehabilitative care, long term care and palliative care.

Why: Medical management of HIV and HCV requires a strong primary care interface. The large numbers of people living with both diseases necessitates a shift from the specialist managed care that characterized the early days of the epidemic. More importantly, the shift in the nature of the illness from an acute to a chronic disease has far reaching implications for ongoing supports, information and coordination of care that are best managed by a partnership between primary health care providers, specialists and the patient.

A particular challenge within HIV and HCV care is that marginalized populations who are the most vulnerable to infection and rapid disease progression are least likely to have strong primary health care relationships—let alone strong relationships with specialist care. Marginalized people with HIV/HCV often do not have a family doctor and rely on hospital emergency rooms for primary health care and HIV/ HCV care. When they do seek medical attention, they are often much further along in their disease progression and require acute care and lengthy hospitalization.

How: Work closely with VIHA Primary Care and Chronic Disease Management to increase primary health care and chronic disease management capacity in targeted communities through partnerships; to increase access to VIHA operated primary health care and chronic disease management services through interdisciplinary staff teams; and to strengthen supporting infrastructure, networks and innovation.

Specific initiatives that will strengthen primary health care and chronic disease management relationships for priority populations at-risk of infection and living with HIV/ HCV include:

- Expanding availability of outreach nursing for inner city, rural/remote and Aboriginal communities
- Expanding use of mobile primary health teams in rural/remote and Aboriginal communities
- Examining ways to link physicians and nurses with agencies serving priority populations (e.g. infrastructure support)
- Increasing availability of primary health care services for priority populations through flexible partnership agreements
- Examining options for supporting general practitioners and family physicians to accept more patients from priority populations (e.g. alternate payment schemes, enhanced CME)

2. HIV/HCV Primary Care

What: Medical management of patients with HIV/ HCV up to and including initial anti-retroviral therapy, primary HIV investigations and management of limited complications. This care includes nursing assessment, HIV/ HCV education, preparation for specialist assessment, physician assessment and treatment planning.

Why: Access to physician services is essential for the management and prevention of HIV/ HCV infection. Through early identification and treatment with appropriate medications, viral loads can be reduced to undetectable levels with subsequent enhanced health for the individual and decreased risk of transmission to others. For individuals with AIDS-defining illnesses, access to physician care is often complex, especially when AIDS affects more than one system and various specialists are required. In addition to treatment of HIV/ HCV, access to physician services for addictions, including methadone treatment, forms part of the spectrum of harm reduction services aimed at decreasing the spread of HIV and HCV.

According to the BC Centre for Excellence in HV/AIDS, there are approximately 135 physicians on the Island who are currently prescribing antiretroviral medications to approximately 400 HIV patients. Five of these physicians have caseloads of 20 or more (all are located in the South Island). The remaining physicians are family doctors or general practitioners with an average of 2.5 HIV positive patients and no specific training in HIV primary care.

Evidence indicates that physicians with few HIV/ HCV patients are at risk for delivering poor quality care due to treatment complexity and continuous advances in treatment knowledge. In the absence of a critical mass of HIV/ HCV patients, community physicians rely on infectious disease specialists, internists and gastroenterologists for HIV/ HCV primary and specialist care.

The most common barriers to accessing physician care are poverty (including lack of transportation and telephones), social isolation, language and cultural barriers. Homophobia and heterosexism within the health care system present additional barriers. Access is further compromised by the limited availability of physicians providing HIV/ HCV-specific services and methadone treatment.

How:

Strengthen capacity of existing community-based primary health care services to provide HIV and HCV primary care, for example Cool Aid Community Health Centre (Victoria).

Incorporate HIV and HCV primary care into planned primary health care services, for example Ladysmith Health Centre (Central Island) and Port McNeil Health Centre (North Island).

Incorporate HIV and HCV primary care into existing and planned reproductive health care services

Incorporate HIV primary care into existing HCV infrastructure where feasible, for example North Island Liver Service (Campbell River)

3. HIV/HCV Specialist Care

What: Outpatient antiretroviral therapy management, assessment of outpatient complications of HIV/ HCV disease and inpatient specialty care.

Why: HIV and HCV care tends to be provided by a small number of primary care physicians and an even smaller number of infectious disease specialists, most of whom are located in large urban centres. On Vancouver Island, there are four HIV specialists: three in Victoria (South Island) and one in Nanaimo (Central Island).

The availability of HIV/HCV specialist care is further hampered by the lack of culturally appropriate services and provider attitudes towards people with HIV/HCV who may have a mental health or addiction problem. All these factors combine to limit access to specialists, antiretroviral therapy, clinical trials or other vital services for people living with HIV and HCV.

For someone requiring specialist care for the medical complications of HIV, including side effects of drug treatment, several different physicians may be involved in their care. It is difficult for even the most sophisticated health care consumers to negotiate their way through the maze of private fee-for-service offices, laboratories, clinics and hospitals. This complex arrangement of physician services is particularly challenging for anyone unfamiliar with the health care system, such as isolated injection drug users or street entrenched youth.

Access to specialist care becomes even more important for people with both HIV and HCV. HIV/ HCV co-infection is associated with higher levels of hepatitis C virus, more rapid progression to HCV-related liver disease, and an increased risk for HCV-related cirrhosis of the liver. The effects of HCV co-infection on HIV disease progression are less certain.

Treatment for co-infection is prolonged and challenging for most people. Public health guidelines in most jurisdictions now recommend that all HIV infected persons should be screened for HCV infection. Clinical consensus guidelines recommend that if HCV is detected in HIV positive individuals before antiretroviral therapy is needed, the HCV can be treated first. If HIV antiretroviral therapy is needed (e.g. to increase CD4 cell counts), it must be started before HCV treatment. However, HCV treatment is often poorly tolerated and requires careful management of side effects to ensure ongoing compliance (Lancet, 2005).

How:

Increase availability and/or accessibility of HIV/ HCV specialists attached to hospitals, primary care community clinics and in private practice.

Increase availability and/or accessibility of addiction medicine specialists attached to hospitals, primary care community clinics and in private practice.

Establish integrated HIV and HCV primary and specialist care clinics in the South Island (Victoria) and Central Island (Nanaimo; to serve both central and North Island); link with VIHA Outpatient Care Review and VIHA Medicine Program divisional planning:

- delivered locally through a network of community physicians with an interest in HIV and HCV primary care and supported at the regional level by HIV and HCV specialists and backed up by the BC Centre for Excellence in HIV/AIDS, Oak Tree Clinic and BC Hepatitis Services

- community physicians to provide initial antiretroviral therapy, primary HIV and HCV investigations and management of limited complications in conjunction with regional specialists

- outpatient care provided by a multidisciplinary teams of primary care physicians, nurses, social workers, pharmacists, dieticians, psychologists and drug and alcohol counselors, with strong links to community clinics and local hospitals, in conjunction with regional specialists; teams to have the skill sets to manage patients with other chronic illnesses, such as diabetes and kidney disease

- collaborate with BC Centre for Excellence in HIV/AIDS, Oak Tree Clinic and BC Hepatitis Services to provide the following support for the community physicians and regional specialists:

    √ clinical guidelines for regional specialty services
    √ telephone and videoconference consultation, advice and support
    √ clinical and laboratory support
    √ information management support
    √ access to drug information and shared patient information
    √ locally accessible continuing medical education
    √ complex patient care
    √ culturally appropriate provider attitudes

4. Antiretroviral Outreach

What: The primary objectives of antiretroviral outreach are to increase access and uptake of antiretroviral therapy among marginalized populations, enhance adherence to antiretroviral therapy, improve the long-term sustainability of antiretroviral therapy, and reduce therapy interruptions through interventions that monitor and support patients.

Why: In BC, one third of the people who died of HIV-related causes between 1995 and 2001 did not receive antiretroviral drug treatment. Of those who died while on treatment, fewer than half were taking their medications as prescribed. A substantial number of those failing to access life saving treatment were injection drug users, Aboriginal people, women and marginalized individuals (Wood et al, 2003).

Recent expert guidelines from Canada, US and elsewhere demonstrate there is an urgent need to consider HCV treatment of illicit drug users as a tool for virological cure and the prevention of ongoing transmission. Such treatment has been shown to be feasible and effective if delivered appropriately, but this requires provisions in the treatment setting and delivery to accommodate the special needs of illicit drug users.

How:

Explore feasibility of implementing MAT:DOT (Maximally Assisted and Directly Observed Therapy) across VIHA with strong links to primary care physicians and HIV/ HCV specialists.

MAT:DOT is a simplified HIV antiretroviral treatment option with intensive support to improve adherence for injection drug users, street involved individuals and those with chaotic or unstable lifestyles.

Monitor results of Cool Aid MAT:DOT study currently underway in Victoria, Vancouver Native Health MAT:DOT pilot project and VCHA MAT:DOT roll-out in Vancouver HSDA.

Work with the North Island Liver Service to strengthen interdisciplinary teams involving hepatology, substance use and mental health as best practice in managing treatment adherence, disposition for psychiatric side effects, and risks of HCV re-infection among illicit drug users. Explore pilot project opportunities with Chronic Disease Management Committee.

Work with VIHA Mental Health and Addictions to have HIV and HCV treatment embedded within substance use programs, such as methadone maintenance.

5. Acute Care

What: Acute care refers to the level of care in which a patient is treated for a brief but severe episode of illness or for conditions that result from disease, trauma or surgery. Acute care also provides palliative care for patients who are seriously ill or dying. Acute care services are provided in hospitals, community health centres and outpost stations and range from basic primary health care to complex surgery.

How:

Enhance knowledge, skills, abilities and capacity (e.g. policy and infrastructure support) to provide effective acute care for people living with HIV/ HCV who are experiencing treatment failure (e.g. gay men who have been on antiretroviral therapy for many years and have developed drug resistance), for people who present at emergency rooms with advanced disease progression due to lack of access to basic primary health care and antiretroviral drug treatment (e.g. street involved injection drug users) and for people with concurrent disorders (e.g. HIV, HCV, addictions and/or mental illness)

Improve outpatient system for HIV and HCV treatment, especially among vulnerable populations (e.g. IV antibiotics treatment and wound management and for homeless clients); collaborate with local health units, primary care clinics and home and community care providers; link with VIHA Outpatient Care Review

Improve hospital discharge planning and support for vulnerable populations (e.g. those least able to access/ engage in care due to unstable housing, addictions and/or mental illness); work closely with community-based service providers to develop comprehensive and highly coordinated networks of support for discharged patients

6. Community Care

What: Community care enables people to remain supported in the community as long as possible and to reintegrate back into the community after treatment. Services include complex residential care, assisted living, transitional care, home-based care, palliative/end of life care and community programs.

Why: The chronic nature of HIV and HCV disease and the increasing burden of cumulative HIV/ HCV-related morbidity and treatment-related toxic effects pose new challenges to the care of patients over time. The emergence of highly active antiretroviral therapy (HAART) as the cornerstone of HIV treatment, and pegylated interferon with ribavarin as the standard for HCV treatment, has helped to transform HIV and HCV into manageable chronic diseases. As people survive longer in the latter stages of progressive HIV and HCV disease, they have increasing need for comprehensive symptom management, as well as wide ranging need for psychosocial, family and care planning support (Selwyn et al, 2003).

The need for palliative care in HIV management is underlined by the prevalence of pain and symptoms, the toxicity side effects and virological failure associated with HAART, emergence of co-morbidities, continued high incidence of malignancies, late presentation of people with HIV disease (especially among marginalized populations), and the comparatively higher death rates among infected individuals. The evidence largely demonstrates that home palliative care and inpatient hospice significantly improved patient outcomes in the domain of pain and symptom control, anxiety, insight and spiritual well being. Quality clinical care should offer palliation as a flexible, integrated approach when needed from diagnosis to end of life, across the range of institutional and home care settings (Harding et al, 2005).

Over the course of the HIV and HCV epidemics, the demographics of affected individuals have changed. Today, there are more people living with HIV/ HCV who are marginalized through addiction and mental illness. Injection drug users and homeless people have traditionally been under-served in systems of care and have significant unmet health needs. Innovative service models are needed to close these service gaps. Blending curative and palliative approaches to the delivery of home care services for HIV/ HCV patients who are least able to access care produces a cost efficient and effective model of care (Melchior, et al).

How:

Increase access to community-based care for people at risk for and living with HIV/ HCV with an emphasis on practical support and accompaniment (e.g. community care for HIV/HCV+ individuals in Central and North Island)

Adapt VIHA Home and Community Care program to better serve people who are homeless or have unstable housing as they transition from acute care to the community through outreach, geographically-based home and community care clinics and mobile home care

Incorporate needs of injection drug users and HIV/HCV + individuals into VIHA Wound Care Collaborative

Expand options for community-based respite care for HIV/HCV+ individuals and their families; work with community-based organizations with expertise in HIV/ HCV respite care (e.g. Victoria AIDS Resources and Community Services Society)

Explore options to provide support for HIV/ HCV + individuals coming from rural/remote and Aboriginal communities seeking treatment in urban centres

Work closely with VIHA Residential Services to address the volume, acuity and direct care needs of HIV/HCV+ individuals in planning for residential care beds, assisted living and supportive spaces in VIHA; work with community-based organizations with expertise in HIV/ HCV residential care to develop appropriate support services for vulnerable populations (e.g. Dr. Peter Centre)

Increase availability and/or accessibility of physician support for end stage AIDS; emphasis on neuropsychological and psychiatric support, especially in the North Island

Rebuild HIV/AIDS palliative care expertise and partnerships in anticipation of next wave of AIDS deaths among people who do not have access to drug treatment (and are likely multi-diagnosed with addiction and/or mental illness) and among those who experience treatment failure or drug resistance after many years of HIV drug therapy

7. Multi-Threshold Mental Health and Addiction Services

What: VIHA Mental Health and Addiction Services (MHAS) serve people of all ages with mental illness and/or substance use disorders. The integration of mental health and addiction services acknowledges that people with concurrent disorders--both mental illness and problematic substance use--are at much higher risk of HIV and HCV infection, have poorer connections to care and treatment and, once infected, experience much more rapid disease progression than the general population.

VIHA is guided by the BC Ministry of Health policy documents, *Every Door is the Right Door: A British Columbia Planning Framework to Address Problematic Substance Use and Addiction* and *Harm Reduction: A British Columbia Community Guide*. Mental health and addiction services include prevention, education and early intervention; harm reduction; crisis/emergency response; outpatient assessment and treatment; acute hospital psychiatry and detoxification/stabilization; tertiary psychiatric care; case management, residential care/housing, rehabilitation and support.

The majority of VIHA services are considered medium to high threshold. Threshold refers to the requirements for entry, participation and successful completion of a program or service. In the addictions field, medium to high threshold services require a strong commitment to abstinence. Low threshold services do not require abstinence. Instead, they work towards engaging participants who actively use drugs while reducing drug-related harm. Low threshold services help to stabilize participants and direct them to more demanding, abstinence-based services if and when they are ready.

Why: Evidence from Switzerland indicates that comprehensive and highly integrated low threshold services are most effective in engaging drug users and reducing drug-related harm, such as HIV and HCV infection. In the mid 1980s, the Swiss had a system of primarily abstinence-based drug treatment, similar to what Canada has now. These services attracted no more than 20% of all active drug users. In the early 1990s, Switzerland implemented a broad harm reduction approach and developed a range of low threshold addiction, health and social welfare services. Today, over 65% of active drug users are in some form of drug treatment and the remainder are in contact with harm reduction services, such as needle exchanges and supervised consumption sites (MacPherson, 1999).

A recent Vancouver study found that the inability to access drug treatment was independently associated with needle sharing among injection drug users at risk for HIV infection. These findings suggest that the limited provision of addiction treatment may result in missed opportunities to reduce HIV transmission risk behaviour and that the expansion of treatment services has major potential to reduce the costs of HIV infection (Wood et al., 2004). Efforts to reduce the HCV-related burden of illness must also address the specific prevention, harm reduction, care and treatment needs of illicit drug users.

How: Ensure the following range of multi-threshold services are provided in each HSDA in collaboration with drug users and community, public and private partners. Wherever possible, incorporate HIV and HCV management into services. Explore partnership opportunities through VIHA MHAS directional document, *Laying the Foundation II: Increasing Access to Effective Addiction Services for Adults*.

Emphasis is on engaging individuals who are *least able to access appropriate care, treatment and support* within the following populations: injection drug users, gay men, MSM, Aboriginal people, youth, women, incarcerated persons, sexually exploited persons and persons with concurrent diagnoses.

- Centralized access for information, referral, initial assessment and triage
- Assertive case management
- Sobering and assessment centres
- Withdrawal management options for different substances and population groups:
  - √ residential detox (e.g. medical and social models)
  - √ outpatient detox (e.g. daytox)
  - √ home-based detox
  - √ alternative models (e.g. acupuncture detox)
- Supportive recovery: wet, damp and dry
- Relapse prevention
- Residential treatment: wet, damp and dry
- Outpatient treatment
- Methadone maintenance: low and medium threshold
- Supportive housing
- Research and development of innovative harm reduction service delivery models:
  - √ Supervised consumption environments with wrap around low threshold services
  - √ Medical prescription of heroin (e.g. build on results of NAOMI pilot in Vancouver)
  - √ Stimulant substitution and medical prescription of stimulants

Community Support

1. Supported Self Care

What: Community and health system support of self management in coping with a disease and development of personal skills for health and wellness.

Why: HIV treatment imposes a substantial burden on individuals who are faced with managing complex therapies and their side effects, meeting increased nutritional requirements, and accommodating the time and travel demands of intensive monitoring and follow-up. People who are able to play an active role in managing their health can expect to live longer and healthier lives. Conversely, those who are unable to successfully manage the disease can expect to experience increasing resistance to medications and fewer benefits of therapy. Disadvantaged populations can expect to have more complex support needs.

The provision of treatment information, peer support and individual advocacy on a wide range of health determinants are essential in supporting HIV positive people to assume an active role in self care. Peer support is critical in helping people adjust to living with HIV/ HCV, cope with the mental and emotional stress of the disease, and rebuild their lives around an altered sense of self and the many demands associated with drug therapy and medical care. Peer involvement is also essential to limiting the spread of HIV and HCV among high risk individuals and groups. Peer groups are highly knowledgeable about how local beliefs, values and behaviours affect vulnerability to infection, and how these can be used to craft relevant interventions (Meeting the Challenge, 2002). Individual advocacy is needed to help people navigate complex health and social service systems and bureaucracies to obtain legally entitled benefits, access services and take advantage of innovative treatment opportunities, such as participation in clinical trials.

How:

Ensure the following support services are provided in each HSDA in collaboration with people living with HIV/HCV and community, public and private partners in health, education, social services and other relevant sectors. Emphasis is on engaging those HIV and HCV positive and at risk individuals who are *least able to access appropriate care, treatment and support once infected* within the following populations: injection drug users, gay men, MSM, Aboriginal people, youth, women, incarcerated persons, sexually exploited persons and persons with concurrent diagnoses.

- Treatment information
- Medication management
- Nutritional support and counselling
- Chronic illness self care support, including wellness
- Peer support
- Individual advocacy

Establish an Island-wide network of culturally competent peer supporters and advocacy workers in major communities to provide assisted referrals, accompaniment (e.g. to doctors' offices, labs and hospitals), emotional and practical support, and help navigating systems to facilitate access to income assistance, housing, employment, child care/protection and other legal entitlements.

2. Housing Support

What: Support in obtaining and maintaining stable housing, defined as an apartment, house or boarding home, which is affordable, safe and appropriate to the person's needs.

Why: Housing has been identified as a basic determinant of health by the World Health Organization. Many studies have reported strong associations between unstable housing and poor health outcomes, such as mental illness and substance use.

A recent study found that injection drug users living in unstable housing in Vancouver were at significantly elevated risk for HIV transmission due to risk behaviours associated with their housing. These IDU tended to be younger and female. Risk behaviours included daily use of heroin or cocaine, needle sharing, sex trade involvement, unprotected intercourse with casual partners, and not being enrolled in addiction treatment (Corneil et al, 2004).

Hospital stays are becoming progressively shorter, relying on the ability of the patient to return home for recuperation where family members or friends can provide support and basic care. For people with unstable housing and limited social support, early discharge--or discharge without regard for housing stability--can pose a serious health risk.

People with unstable housing are often discharged with prescriptions for medication and instructions for self-care that they cannot follow. For successful convalescence, they need extended access to a safe bed, adequate washroom facilities, nutritious food and clean water, secure storage and/or refrigeration for medications, assistance with dressing changes and general nursing support.

One of the common treatment issues for people living with HIV is the management of intravenous antibiotic therapy in an unstable housing environment. While the intensive, six-week, home care intervention often allows earlier discharge from acute care, it also requires a secure place in which to eat, sleep, adhere to the medication schedule, and safely store the intravenous equipment and antibiotics. Antiretroviral therapy also requires a substantial degree of stability in many areas of a person's life. The instability of living with an active addiction in a street-based environment is often used as a reason not to prescribe antiretrovirals to HIV/ HCV positive IDUs.

How: Emphasis is on providing housing support for individuals who are *most at risk of infection and least able to access appropriate care, treatment and support once infected* within the following populations: injection drug users, gay men, MSM, Aboriginal people, youth, women, incarcerated persons, sexually exploited persons and persons with concurrent diagnoses.

- Advocate with housing providers and senior levels of government for transitional and long term supportive housing that meets the needs of people most at risk of HIV/ HCV infection (e.g. facilities and support services across housing continuum for active, relapsing and recovering drug users)
- Advocate with Wings HIV/AIDS Housing Society of BC and senior levels of government for more portable rent subsidies for people living with HIV/ HCV in VIHA
- Advocate for non market housing to better meet needs of people living with HIV/ HCV (e.g. training and support for landlords)
- Work with VIHA Home and Community Care to ensure support services to designated housing units meet the needs of people living with HIV/ HCV
- Explore discharge housing planning service for street based IDU and HIV/ HCV positive patients leaving hospital (e.g. Vancouver Native Health, Positive Outlook Program)

Performance Measures: *Care, Treatment and Support (CTS)*

Population Outcomes:

Performance Measure	Baseline	Target		
		2006/07	2007/08	2008/09
		100% linked	100% linked	100% linked
1. Number of new HIV cases linked to appropriate CTS services	See prevention target #1	**VIHA 50**	**VIHA 43**	**VIHA 36**
		NI 4	NI 4	NI 3
		CI 13	CI 11	CI 9
		SI 33	SI 28	SI 24
2. Number of new HCV cases linked to appropriate CTS services[3]	see prevention target #2	**VIHA 416**	**VIHA 356**	**VIHA 297**
		NI 47	NI 40	NI 33
		CI 141	CI 121	CI 101
		SI 228	SI 196	SI 163

Future Performance Measures:

- Reliable HIV and HCV prevalence estimate (e.g. not cumulative incidence)
- Proportion HIV+ and HCV+ people currently on drug treatment
- Of those who are HIV+ but not on drug treatment:
  - CD-4 count
  - HIV viral load
  - Opportunistic infections
- HIV and HCV disease progression (e.g. onset of AIDS-defining illnesses)
- Quality of life of people living with HIV and HCV
- May Not Require Hospitalization (MNRH) cases per 1000 population (e.g. rates of admission for conditions that could be managed outside the hospital)
- Alternate Level of Care (ALC) days as percentage of total inpatient days (e.g. percentage of days spent by patients in hospital after the need for acute hospital care has ended)

Drug Treatment: for monitoring purposes only

Number of people on antiretroviral therapy as of September 30, 2005

	All	Male	Female
3. Number of HIV+ persons receiving antiretroviral therapy[4]	**VIHA 393**	**325**	**68**
	NI 35	24	11
	CI 103	75	28
	SI 255	226	29

[3] Please note, at this time there are no BC targets for HCV treatment. The VIHA HCV treatment targets are recommendations only based on the provincial HIV targets.

[4] ARV therapy starts when AIDS defining symptoms are present or when the CD-4 count drops below 350. Patients can stop and resume drug treatment for a variety of reasons (toxicity side effects, drug resistance, improved CD-4 counts)

Goal #3: Capacity

Significantly enhanced capacity of VIHA and its partners to anticipate and respond to new HIV and HCV trends, affected populations, and service needs

The following strategies address the core functions identified in the VIHA HIV and HCV Continuum of Services. Stronger core functions will enable VIHA to deliver more effective HIV services and achieve greater value for money. However, most of the core functions are outside the mandate of VIHA Population and Family Health and implementing these strategies will require significant collaboration with other VIHA service areas, disciplines, professions and institutions.

Strategies:

1. Physician Services

Explore alternative payment schemes to encourage fee for service physicians to provide primary health care services to marginalized or "hard to serve" patients in community-based settings (e.g. sessional funding plus guarantee for no-shows)

Advocate for allocation of sessional funding to better support HIV/ HCV care and treatment services in each health service delivery area in conjunction with primary care physicians and community clinics (including proposed integrated HIV/HCV primary and specialist clinics in South and Central Island):

- South Island: Cool Aid Community Health Centre, Youth Health Clinic
- Central Island: AIDS Vancouver Island Health Centre, Ladysmith Community Health Centre
- North Island: North Island Liver Service, Comox Valley Nursing Centre, Port Hardy Youth Health Clinic, Port McNeil Health Centre

Work with BC Centre for Excellence in HIV/AIDS, BC Hepatitis Services and community service providers to increase support for community physicians re: latest developments in HIV/ HCV care and availability of local support and referral resources for HIV positive patients.

Work with Island Medical Program to create HIV/ HCV clinical placement opportunities for medical students and residents in hospital and community settings that serve priority populations.

2. Nursing Services

Expand and support role of nurse practitioners in HIV/HCV primary care.

Expand nursing resources (e.g. public health, primary health, community care and hospital care nursing resources) to provide nursing clinical care as part of comprehensive needle exchange, HIV/HCV primary care, antiretroviral outreach, and multi-threshold addiction services.

3. Medical Transportation

Establish a secure system of medical transportation funding and support for residents and health care providers in rural/remote communities, with special attention to isolated Aboriginal communities.

4. Surveillance

Work with BC Centre for Disease Control, BC Centre for Excellence in HIV/AIDS and Centre for Addiction BC to develop reliable HIV and HCV prevalence estimates in the general population at the regional, HSDA and community level.

Work with BC Centre of Excellence in HIV/AIDS to create long term, at-risk surveillance cohorts. Build on infrastructure and lessons learned from VIDUS (injection drug users), CHASE (inner city residents) and Cedars (Aboriginal youth) cohort studies. These studies link administrative health databases to establish HIV and HCV vulnerability, incidence, prevalence, testing, antiretroviral drug use and hospital utilizations.

5. Research and Evaluation

Work with BC Centre for Disease Control and BC Centre for Excellence in HIV/AIDS to access their latest research and evaluation findings, share these with community partners, and build them into service design and delivery on a continuous basis.

Collaborate with community partners, BC Centre for Excellence in HIV/AIDS, Centre for Addictions Research of BC and other institutional partners to participate in research to generate evidence for local or regional needs assessment and effective HIV and HCV prevention, treatment and support.

Work with BC Centre for Excellence in HIV/AIDS, Centre for Addictions Research of BC and community partners to build capacity for outcome monitoring and evaluation at the program level.

6. Inter-professional Education

Identify community and hospital physicians engaged in HIV/ HCV prevention, care, treatment and support in each HSDA; assess their needs for CME (e.g. from testing and counselling to prescribing antiretroviral therapy); work closely with BC Centre for Excellence in HIV/AIDS, BC Hepatitis Services and VIHA Office of Continuing Professional Development and Knowledge Translation to develop and deliver targeted, user friendly CME

Explore opportunities for accreditation of HIV/ HCV-related CME with College of Family Physicians of Canada and Royal College of Physicians and Surgeons; coordinate accreditation efforts through UBC Office of Continuing Professional Development and Knowledge Translation

Support general practitioners and family physicians in their offices, especially those with small numbers of HIV/ HCV patients, by encouraging the development of shared care models and collaborative clinical networks (e.g. through education, on site consultation, tool development [such as user friendly family practice clinical guidelines for HIV and HCV] and support for application of new knowledge)

Work with BC Centre for Excellence in HIV/AIDS to increase access for VIHA physicians to the Centre's HIV preceptorship program and create local HIV preceptorship opportunities with VIHA specialists and services (e.g. link local preceptorships to proposed integrated HIV/HCV primary and specialist clinics in South and Central Island).

Use general hospital orientation, in-service and other training, hospital rounds and community-based new hire orientation to provide continuing education in HIV, HCV and concurrent disorders; build inter-professional perspective and model on Interdisciplinary AIDS Care Rounds at St. Paul's Hospital, developed by BC Centre for Excellence in HIV/AIDS.

Coordinate delivery of a full range of HIV/HCV education for nurses, allied care providers and non-professional health care providers in both residential and community settings (e.g. home support workers and Community Health Representatives in Aboriginal communities); work closely with BC Centre for Excellence in HIV/AIDS, Oak Tree Clinic, BC Hepatitis Services, STD/AIDS Control (including Chee Mamuk), BC Persons with AIDS Society, Positive Women's Network, Healing Our Spirit and Red Road

Work with BC Centre for Excellence in HIV/AIDS and BC Hepatitis Services to ensure access to latest developments in HIV and HCV care through distance education, online or web-based resources and other communication technologies

Funding

Funding for HIV and HCV services on Vancouver Island comes from a variety of sources, including the federal and provincial governments, provincial and regional health authorities, university/hospital and research foundations, pharmaceutical companies, and the fundraising efforts of community-based service providers.

The Public Health Agency of Canada (PHAC) funds HIV prevention and support at the community level through the AIDS Community Action Program (ACAP). This funding is both operational and time-limited or project based. ACAP funds HIV prevention and support for Aboriginal people living off reserve. On reserve HIV services are funded by the federal First Nations and Inuit Health Branch. PHAC also funds HCV work at the community level through the Hepatitis C Prevention, Support and Research Program. This program has been extended to March 31, 2006.

The Canada Drug Strategy funds the prevention and reduction of harms associated with substance use, including HIV and HCV transmission, at the community level through the Drug Strategy Community Initiatives Fund (DSCIF). This funding is time-limited only. DSCIF also funds harm reduction for Aboriginal people living off reserve.

The BC Ministry of Health Services funds HIV drug treatment through Pharmacare. The provincial HIV Drug Treatment Program is administered by the BC Centre for Excellence in HIV/AIDS. This program provides HIV antiretroviral drugs free of charge to all eligible British Columbians. There is no similar program for HCV drugs.

Until 2001, the provincial government also funded HIV prevention and support, however, this responsibility has since been transferred to the regional health authorities. VIHA now manages a $1.5 million budget for primarily community-based HIV prevention and support services across Vancouver Island.[5]

The BC Centre for Excellence in HIV/AIDS provides a range of HIV treatment services, including clinical and laboratory support and complex patient care, as well as research, evaluation and professional education. These services are available to health authorities, community service providers and physicians across the province.

The Provincial Health Services Authority (PHSA) funds HIV surveillance through the BC Centre for Disease Control. It funds specialized HIV treatment for women and children through the Oak Tree Clinic at BC Women's and Children's Hospital. The PHSA also funds provincially-mandated community service providers, such as BC Persons with AIDS Society and Positive Women's Network.

BC Hepatitis Services, a division of the BC Centre for Disease Control, funds the delivery of integrated HCV prevention, treatment and support through five regional hepatitis pilot sites around the province. These pilot sites operate in partnership with the regional health authorities. The North Island Liver Service on Vancouver Island also receives funding from Schering Canada.

HIV prevention and support is also funded by community-based service providers through their own fundraising efforts.

[5] Funding for HIV services in the Mt. Waddington area, originally provided by the Mt. Waddington Community Health Council, is included in this budget.

Current Resource Allocation

The VIHA Population and Family Health budget for HIV and HCV services on Vancouver Island is approximately $1.5 million. This budget was originally intended to fund community-based HIV prevention and support services only. The challenge now is to fund a comprehensive continuum of HIV and HCV prevention, care, treatment and support services within existing resources.

VIHA Population and Family Health currently funds four community-based organizations to deliver HIV and HCV prevention and support services on Vancouver Island.

- Vancouver Island Persons Living with HIV/AIDS Society (South Island)
- Victoria AIDS Resources and Community Services Society (South Island)
- AIDS Vancouver Island (Island-wide) [6]
- Nanaimo Area Resource Services for Families (Central Island)

Three other community organizations are funded by VIHA to provide HIV/ HCV services on Vancouver Island. Funding for these services is not part of the $1.5 million budget. In some cases, the funding comes from senior levels of government and is earmarked for specific purposes. While the services provided by these organizations are distinct, they are an integral part of the VIHA HIV and HCV continuum of services.

- Cool AID Community Health Centre (South Island)
- Victoria Native Friendship Centre (South Island)
- Tillicum Haus Native Friendship Centre (Central Island)

Funding Strategy

In order to achieve the ambitious goals contained in this strategy, VIHA will:

√ ***Target*** the investment of current HIV and HCV-designated resources

√ ***Integrate*** HIV and HCV into existing infrastructure within VIHA

√ ***Leverage*** new resources for HIV and HCV prevention, treatment and support

Targeted Investment

The current budget will be used to fund two categories of HIV and HCV service delivery in VIHA: targeted prevention and support (for at risk groups and people living with HIV and/or Hepatitis C) services, and comprehensive needle exchange. Requests for proposals (RFP) will be issued for core services in each category to be provided at the local health area and/or community level across the health authority.

Individual organizations and groups of organizations will be encouraged to apply. Municipal governments and regional and provincial health authorities will not be eligible to apply. Eligible organizations will include non-profit organizations, community-based for-profit organizations, peer

[6] AIDS Vancouver Island is providing services in the Mount Waddington area on an interim basis. These services were provided by the former North Island AIDS Society.

or consumer-based groups, Aboriginal organizations (on and off reserve) and institutional organizations. Opportunities may exist for submitting agencies to develop a partnership with VIHA for the delivery of services; however, VIHA direct service staff cannot be funded through this RFP process.

As noted above, funding for the Cool Aid Community Health Centre, Tillicum Haus Native Friendship Centre and Victoria Native Friendship Centre is not part of the HIV/ HCV budget and the services provided by these organizations will not be tendered through the RFP process. However, these organizations are eligible to apply for funding from the HIV/HCV budget, either individually or as part of a group submission through the RFP process.

Integration of Services

The following HIV and HCV-specific services will be integrated into existing infrastructure within VIHA. These services will not be funded from the current HIV budget.

Primary Prevention

HIV/HCV primary prevention (e.g. universal interventions targeting the general population) will be delivered through the integration of HIV and HCV into *existing* primary prevention services provided directly by VIHA or through contracted agencies in public health, Aboriginal health, child, youth and family health, mental health and addictions, and other areas of VIHA that address primary prevention.

Care and Treatment

HIV/HCV care and treatment will be delivered through the integration of HIV and HCV into *existing* primary health care, chronic disease management, mental health and addictions services, hospital care, home and community care and end of life care that are provided directly by VIHA and its contracted agencies. HIV/ HCV primary and specialty care and antiretroviral outreach will be delivered through partnerships with physicians, community clinics, pharmacies, BC Centre for Excellence in HIV/AIDS, Oak Tree Clinic and BC Hepatitis Services.

Leverage New Resources

VIHA will continue to identify and leverage new sources of funding to deliver the comprehensive continuum of HIV/ HCV services. For example, VIHA is exploring the option of partnering with the BC Centre for Excellence in HIV/AIDS to obtain matching funds from the Canada Foundation for Innovation to build capacity for at-risk surveillance and satellite HIV specialist care across the Island.

Management Framework

As previously mentioned, HIV and HCV services are now part of Population and Family Health. A matrix management framework that actively engages relevant service areas across VIHA will be crucial to ensuring the continuum of HIV/HCV service needs are provided through existing and planned services, infrastructure and resource allocation. This will be especially important for managing HIV/HCV care and treatment services.

The relevant service areas include:

- Primary Health Care and Chronic Disease Management
- Medicine
- Community Hospitals and Rural Medicine
- Mental Health and Addictions Services
- Home and Community Care
- Residential Services
- End of Life Care

HIV/HCV Coordination

Closing the Gap proposes the creation of a blood-borne pathogens coordinator position within VIHA Population and Family Health. The position will be responsible for coordinating the implementation and assessment of the strategy, developing collaborative partnerships across VIHA program areas, facilitating knowledge exchange between the research community, VIHA and community service partners, and managing relationships with community service partners and key stakeholders.

The community-based advisory structure originally created to guide the development of the service plan will be maintained and resourced to support the implementation of the plan. The three advisory groups are the South Island HIV/HCV Working Group, Central Island HIV/HCV Working Group and North Island HIV/HCV Working Group. This infrastructure will provide a valuable forum for sharing ideas, information and lessons learned, and ensure the meaningful involvement of people living with HIV/HCV at the local level.

A technical advisory committee will be established to provide research, policy, practice and evaluation advice and support. This committee likely will be comprised of the following:

- People living with HIV/HCV
- Physicians
- VIHA senior staff from relevant program areas
- BC Centre for Excellence in HIV/AIDS
- BC Centre for Disease Control
- Oak Tree Clinic
- Ministry of Health Services – Communicable Disease and Addictions Prevention
- BC Corrections – Health Services
- Correctional Services Canada – Health Services
- Public Health Agency of Canada – AIDS Community Action Program
- Health Canada - First Nations Inuit Health Branch; Drug Strategy Community Initiatives Fund

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Appendices

Appendix #1: Current HIV/HCV-related Service Providers

South Island	Central Island	North Island
HIV/HCV and Other Consumer Groups		
• Vancouver Island Persons Living with HIV/AIDS Society • Society of Living Injection Drug Users • Regional Addictions Advocacy Society	• Vancouver Island Persons Living with HIV/AIDS Society • Mid Island Hepatitis C Society • Addicts Right to Choose Health	• Vancouver Island Persons Living with HIV/AIDS Society
HIV/HCV Community Service Organizations		
• AIDS Vancouver Island • Victoria AIDS Resources and Community Services Society • Hepatitis C Society of BC	• AIDS Vancouver Island • Mid Island HIV/AIDS Society	• AIDS Vancouver Island
Aboriginal Service Providers		
• Victoria Native Friendship Centre	• Hiiye'yu Lelum (Duncan House of Friendship) • Tillicum Haus Native Friendship Centre • Port Alberni Friendship Centre • Kakawis Family Development Centre (Tofino)	• Wachiay Friendship Centre • Laichwilth Family Life Centre • Sacred Wolf Friendship Centre
• 9 reserve communities: Songhees, Esquimalt, Beecher Bay, Pacheedaht, Pauquachin, T'Sou-ke, Tsartlip, Tsawout, Tseycum	• Cowichan Tribes – Tsewultun Health Centre • Nuu-chah-nulth Health Services • Sh'ulh-etun Tribal Council • Snuneymuxw First Nations	• InterTribal Health Authority • Kwakiutl District Council • Namgis First Nation
Allied Community Service Organizations		
• Cool Aid Community Health Centre • Victoria Youth Clinic • YM-YWCA Outreach • Prostitutes Empowerment Education Resources Society • John Howard Society • Downtown Victoria Service Providers Group	• Nanaimo Area Resources and Services for Families • Options for Sexual Health • Port Alberni Youth Health Society	• Options for Sexual Health

Appendix #1: Current HIV/ HCV-related Service Providers (con't.)

South Island	Central Island	North Island
VIHA Direct Services		
• Public Health • Child, Youth and Family Health • Aboriginal Health • Mental Health and Addictions • Home and Community Care • Residential Services • End of Life Care • Primary Care and Chronic Disease Management • Medicine • Community Hospitals and Rural Medicine	• Public Health • Child, Youth and Family Health (includes Central Island Viral Hepatitis Service) • Aboriginal Health • Mental Health and Addictions • Home and Community Care • Residential Services • End of Life Care • Primary Care and Chronic Disease Management • Medicine • Community Hospitals and Rural Medicine	• Public Health • Child, Youth and Family Health (includes North Island Liver Service) • Aboriginal Health • Mental Health and Addictions • Home and Community Care • Residential Services • End of Life Care • Primary Care and Chronic Disease Management • Medicine • Community Hospitals and Rural Medicine
Allied Institutional Service Providers		
• Vancouver Island Regional Correctional Centre • Victoria Youth Custody Centre • School Districts 61, 62, 63	• Vancouver Island Regional Correctional Centre • Nanaimo Regional Correctional Centre • School Districts 64, 68, 69, 70, 79	• Vancouver Island Regional Correctional Centre • School districts 71, 72, 84, 85
Provincial Service Providers		
• BC Centre for Disease Control - STD/AIDS Control • BC Centre for Excellence in HIV/AIDS • BC Hepatitis Services • BC Women and Children's Hospital - Oak Tree Clinic • BC Persons with AIDS Society • Positive Women's Network • YouthCo HIV/AIDS Society • Red Road Aboriginal HIV/AIDS Network • Healing Our Spirit, BC Aboriginal HIV/AIDS Society • Wings HIV/AIDS Housing Society		

Appendix #2: VIHA HIV/HCV Working Group Members

South Island HIV/ HCV Working Group

Penny Bradford	Vancouver Island Persons Living with HIV/AIDS
Charlotte Kinzie	Vancouver Island Persons Living with HIV/AIDS
Ruby Black	Vancouver Island Persons Living with HIV/AIDS
Gordon McKillop	Vancouver Island Persons Living with HIV/AIDS
Ed Steele	Vancouver Island Persons Living with HIV/AIDS
Michael Yoder	Victoria AIDS Resource and Community Service Society
Miki Hansen	AIDS Vancouver Island
Katrina Jenson	AIDS Vancouver Island
Carol Romanow	Society of Living Injection Drug Users
Robert McGillivray	Society of Living Injection Drug Users
Steve McDougall	Narcotic Anonymous
Elizabeth Smith	Victoria Native Friendship Centre
Jody Paterson	Prostitute Empowerment Education Research Society
Karen Dennis	Hepatitis C Education and Prevention Society
Dr. Murray Fyfe	Medical Health Officer, VIHA
Audrey Shaw	Street Nurse Outreach, VIHA
Jo Dunderdale	Home and Community Care, VIHA
Darlene McGougan	Aboriginal Health, VIHA
Gwen Ewan	Mental Health and Addictions, VIHA
Kathryn Saunders	YM-YWCA of Greater Victoria
Irene Haigh Gidora	Cool Aid Community Health Centre
Francoise Juneau	Cool Aid Community Health Centre
Mary Kay MacVicar	Cool Aid Community Health Centre
Wynne Dobbs	Vancouver Island Regional Correctional Centre
Irma Soltonovich	Vancouver Island Regional Correctional Centre
Wendy Collins	Victoria Youth Custody Centre

Appendix #2: VIHA HIV/HCV Working Group Members

Central Island HIV/ HCV Working Group

Penny Bradford	Vancouver Island Persons Living with HIV/AIDS
Charlotte Kinzie	Vancouver Island Persons Living with HIV/AIDS
Ruby Black	Vancouver Island Persons Living with HIV/AIDS
Gordon McKillop	Vancouver Island Persons Living with HIV/AIDS
Ed Steele	Vancouver Island Persons Living with HIV/AIDS
Miki Hansen	AIDS Vancouver Island
Claire Dineen	AIDS Vancouver Island
Dana Becker	AIDS Vancouver Island
Gordon Cote	Nanaimo Area Resources and Services for Families
Douglas Hardie	Nanaimo Area Resources and Services for Families
Dr. Fred Rockwell	Medical Health Officer, VIHA
Mary Hill	Child, Youth and Family, VIHA
Claire Coombs	Communicable Disease Control, VIHA
Viviane Johnson	Community Nutritionist, VIHA
Pat Townsley	Adult Addictions Services, VIHA
Melina Simonian	Tillicum Haus Native Friendship Centre
Catherine (Ivy) Williams	Cowichan Tribes, Tsewultun Health Centre
Fairlie Mendoza	Cowichan Tribes, Tsewultun Health Centre
George Rice	Hiiye'yu Lelum House of Friendship
Christine Curley	Nuu-chah-nulth Tribal Council
Mavis Wyse	Sh'ulh-etun Health Centre
Elaine Clark	Snuneymuxw First Nations
Martha Hardy	Nanaimo Regional Correctional Centre
Lora Johnson Corbett	Addicts Right to Choose Health
Deanne Girvan	Cowichan Secondary School

Appendix #2: VIHA HIV/HCV Working Group Members

North Island HIV/ HCV Working Group

Penny Bradford	Vancouver Island Persons Living with HIV/AIDS
Charlotte Kinzie	Vancouver Island Persons Living with HIV/AIDS
Ruby Black	Vancouver Island Persons Living with HIV/AIDS
Gordon McKillop	Vancouver Island Persons Living with HIV/AIDS
Ed Steele	Vancouver Island Persons Living with HIV/AIDS
Miki Hansen	AIDS Vancouver Island
Phyllis Wood	AIDS Vancouver Island
Nancy Jacques	Namgis Health Centre
Shelley Henderson	Inter Tribal Health Authority
Laurie Dokis	Inter Tribal Health Authority
Michelle Anderson	Kwakuitl District Council, Campbell River
Jamuga Cook	Kwakuitl District Council, Port Hardy
Michele Boissonneault	Kwakuitl District Council, Cape Mudge
Lynn West	Nuu-chah-nulth Tribal Council, Gold River
Dean Wilson	Sacred Wolf Friendship Centre, Port Hardy
Lee Everson	Wachiay Friendship Centre
Dr. Charmaine Enns	Medical Health Officer, VIHA
Sandra Waarne	Child, Youth and Family Health, VIHA
Susan McCormac	Campbell River Hospital
Donna McNeil	Communicable Disease Control, VIHA
Pauline Melanson	North Island Liver Services
Michelle Crosby	North Island Liver Services