Recommendations for the Implementation of a Hepatitis C Screening Program at King County Correctional Facility

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These recommendations are concomitant with Master in Public Health coursework for the University of Washington.

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Section I. Background: Epidemiology of HCV Infection in the U.S.

Brief Overview of a Growing Public Health Challenge

It is estimated that anywhere from 3.5- 5.3 million people in the United States are currently infected with viral hepatitis, of which 2.7 – 3.9 million have hepatitis c (HCV)\(^1,2\). While the overall incidence of hepatitis has gone down in the United States in the last 20 years, it is believed that up to 75% of HCV infected individuals do not know their hepatitis status and are going prolonged periods of time without treatment leading to a significant increase in hepatocellular carcinoma\(^2,5\). In the past two decades the incidence of hepatocellular carcinoma related to chronic HCV infection have tripled, becoming the fastest growing cause of cancer related death in the US\(^6\). HCV is also the leading cause for liver transplantation in the United States\(^7\).

The public health burden of chronic untreated HCV in the United States may just be emerging, with some estimating the financial costs and number of those who need advanced care to double or triple in the next 10-20 years\(^5\). Currently available drug therapies for HCV produce a sustained virologic response in 20%-46% of genotype I infected individuals\(^8,9\). However, many individuals can clear the virus from their bodies without drug therapy and unlike HIV, not every person with chronic HCV is indicated to being drug therapy immediately\(^8\). New drug treatment regimes that purport to be more efficacious and more acceptable to patients are currently undergoing approval by the Food and Drug Administration\(^10,11\). A review of National Health and Nutrition Examination Survey (NHANES) data from 1999- 2002 found that 48.8% of all anti-HCV-positive persons reported a history of injection drug use\(^12\). In addition to history of injection drug use, abnormal serum ATL levels and history of a blood transfusion before 1992 predicted 85.1% of all reported HCV-RNA positive participants\(^12\). Peak prevalence of HCV was observed in individuals 40-49 years of age\(^12\).

These numbers most likely underestimate the prevalence of HCV and the morbidity associated with the virus in the general population because they do not include incarcerated or homeless individuals who are known to have higher rates of infection. There is also the confounding factor of alcohol use in homeless/incarcerated populations that accelerates liver disease\(^12\).

Identifying Individuals at Risk for HCV Infection

Persons Who Inject Drugs

While overall incidence and prevalence of HCV has been reduced in the US, persons who inject drugs continue to be disproportionately affected by HCV\(^13\). Injection drug use continues to be the strongest risk factor for HCV infection in the United States\(^12,13\).
Increasing Age

Individuals born between 1945-1965 known as the “baby boomers” or “birth cohort” are believed to have the highest HCV infection rates of any age group in the United States. It is estimated that 1 in 33 individuals in this age group is HCV seropositive. Current risk based screening practices do not regularly reach this population and are thought to be complicating the picture of HCV prevalence in the United States. Anyone with a percutaneous exposure to blood is at risk for HCV infection, yet many baby boomers may no longer identify with past risk taking behavior (injection drug use) or are unaware that a blood transfusion before 1992, tattoos at unlicensed establishments, and ongoing hemodialysis all increase the risk of HCV infection.

Race, Gender, and Sex Practices

African Americans are twice as likely to be infected with HCV than any other race. Men are also more likely to be infected than women. Men who have sex with men (MSM), particularly those who use IV drugs, are also at increased risk for HCV infection.

It should be noted that the United States Preventative Services Task Force (USPSTF) released less enthusiastic, yet still compelling, draft recommendations for routine HCV screening for high risk populations (people who inject drugs (PWID)) and one-time screening for members of the “birth cohort” in 2012. USPSTF’s grade B recommendation for routine screening for PWID implicates a “moderate to strong certainty that the net public health benefit from this service would be moderate.” Lack of surveillance data and randomized control trials among both PWID and the birth cohort members make more certain recommendations impossible.

HCV in Corrections

While HCV infection may only account for 2% of the US general population, 23%-43% of HCV infected individuals are released from a correctional setting each year. Up to one million chronic HCV infected individuals come in contact with the corrections system every year. This is partially due to the increase in drug related arrests. In the 1990s for example, drug arrests increased by 137% and accounted for 59% of federal prisoners in the year 2000. These facts illustrate the impetus behind growing recognition of correctional settings, including jails, as an important point of intervention for public health officials looking to curb the spread of hepatitis C.
Section II. Model Screening Programs: HCV Screening in U.S. Correctional Settings

Hepatitis Continuity Program- New York State Prison Program

Interview with Colleen A. Flanigan RN MPH Director Viral Hepatitis Section New York State Department of Health

The Hepatitis Continuity Program is a prison HCV screening and treatment program initiated in New York State in 2005 with a focus on connection to care upon release into the community. The program is meant as an intervention to reduce “indeterminate length of stay as a barrier to screening and treatment.” The program represents a collaboration between the New York State Department of Health, the New York State Department of Corrections and Community Supervision (NYS DOCCS), and the AIDS Institute. The program is targeted towards prisoners who are infected with HCV and eligible for HCV treatment. Prisoners who test positive are treated and evaluated based on clinical guideline recommendations outlined by the National Institute for Health, the Centers for Disease Control and Prevention and the American Association for the Study of Liver Disease.

A state-wide referral system for prisoners released into the community was established, including New York City public hospitals and primary care providers who agreed to accept released prisoners for follow up care on short notice, and at no charge for the uninsured. The Division of Parole has played a crucial role in connecting inmates with care in the community by tasking community and facility parole officers with assisting inmates in accessing care for completion of HCV treatment.

Currently there are 37 statewide providers participating in the program, some of which are hospitals, some “Designated AIDS Centers” (DAC) as determined by the New York State Department of Health AIDS Institute, and the vast majority of which are community providers.

NYS DOCCS staff help identify inmates who have chronic hepatitis infection and may not be in prison long enough to complete treatment. The DOCCS staff then meets with the inmate to explain that they can complete their treatment outside of the prison at no cost, but need to go to one of the participating providers to do so. A provider is selected that will be most convenient for the inmate in the area in which they are being released. DOCCS health care staff aid the inmate in filling out paperwork to participate in the HCV Continuity Program. The paperwork includes a release of information for their medical records from prison to be transferred to the participating provider of their choice, an application for Medicaid or other assistance programs, a limited release of medical information that allows the community parole officer to aid them in making and
keeping appointments, and a waiver for the AIDS Institute to access some of their medical data for ongoing program surveillance and evaluation\textsuperscript{19}.1

The DOCCS supplies enough Ribavirin to the inmate upon release to get them to their appointment in the community and ships a two-week supply of pegylated interferon to the community provider where the inmate has scheduled. Ideally the inmate is released on the same day as an appointment as they are more likely to go to the appointment at that time. However this is not always possible despite the best efforts of correctional and parole staff \textsuperscript{19}.

The year-end report for the HCV Continuity Program from 2012 found that overall 57.9\% of inmates released with a referral for HCV treatment completion at a community providers\textquoteright office kept their initial appointment, although appointments kept varied significantly between inmates released into the New York City area (33.3\%) and all other areas in the state ((80.0\%) p<0.001)\textsuperscript{21}. Chart reviews of patients enrolled in the program found a 23\% treatment completion rate, of which 15.4 \% showed sustained virologic response, 7\% experienced unsuccessful treatment, and the rest were either re-incarcerated, lost to follow up, or failed to show for the last viral load test to determine if the treatment was successful\textsuperscript{22}.

While this program is only implemented in prisons in New York State, the HCV Continuity Program provides an interesting model to consider when looking at the implementation of a jail screening program at King County Correctional Facility. Assuming that treatment cannot be initiated in the majority of the jail population, due to short lengths of stay, the HCV Continuity Program provides an example of a systematic and coordinated approach to community referrals for those needing HCV confirmation and treatment. Length of stay presents an even larger barrier to initiating treatment in a jail setting. Yet, with carefully orchestrated community collaborations and referrals, this important point-of-care setting for HCV infected individuals can be an appropriate place for HCV screening and counseling.

The obligation to care for and treat those with confirmed chronic hepatitis is often cited as a barrier for jail health care providers to initiate HCV screening in the jail. However, with intention and coordination the obligation to treat could be met in community. It should also be acknowledged that not all anti-HCV positive individuals in the jail would be indicated for immediate treatment, a quick assessment of mental health status, and drug and alcohol dependency may indicate other referrals as a starting point in the path to HCV treatment and primary care seeking behavior.

\textit{The Communicable Disease Prevention Program – Utah State Jails and Prisons}

\textit{Interview with Erin Hellstrom BS, CHES Project Coordinator Utah State Department of Health Communicable Disease Prevention Program}

In March of 2012 the Utah State Department of Health was granted category C monies released by the CDC for a demonstration project. The requirements of the grant were that the project be a “state of the art” screening program that provided strong

\textsuperscript{1} See appendix for HCV Continuity Program materials
\textsuperscript{2} See appendix for Utah Jail and Prison Testing Program Community Referrals
linkages to care and addressed a gap in services. They were awarded the money as an overall HIV/STI screening program that focuses on correctional settings\textsuperscript{23,24}.

The Communicable Disease Prevention Program currently screens for HIV, HCV, and Chlamydia and Gonorrhea in three correctional settings, including juvenile detention, in Utah. Before this grant, only the Utah State Prison was routinely screening for HIV for inmates being brought to the facility. The grant is funded for 2 years with a possible extension for 2 more years. The goal of the project is to compile data for the Utah Senate for statewide policy change that would adopt HIV and STI screening and treatment as part of routine correctional care\textsuperscript{23}. Currently, no state funding is contributed to the project, only federal grant monies\textsuperscript{24}.

Ms. Hellstrom is the only full time employee of the program. There is also a part time employee and an intern who make up the program staff. They contract out some of their grant monies to two local health departments for the project, one of which hires two part time positions to implement testing and education in their correctional facilities\textsuperscript{23}.

It was very hard to sell a correctional screening program in Utah because the correctional facilities, including medical staff, are very risk adverse\textsuperscript{23}. There is concern over liability for care if this chronic disease is identified at intake. The Communicable Disease Prevention Project was able to get around this by taking on the liability for the program as not affiliated with corrections, and by assuring that every positive patient is being referred to an outside provider or community based organization where they can access confirmatory testing and get connected with primary care\textsuperscript{23}.

The program currently uses HCV antibody rapid testing and then refers anti-HCV positive clients for signal to cutoff ratio testing for active hepatitis confirmation\textsuperscript{23}. In the state of Utah the signal to cutoff ratio testing is considered adequate to confirm active Hepatitis C infection\textsuperscript{23,25}. The laboratory confirmed diagnosis of active hepatitis infection is defined by the Utah State Department of Health’s Guidelines for Hepatitis C Surveillance as: an individual receiving a positive RIBA or NAT HCV test, or, an individual with a positive antibody HCV test followed by a signal to cutoff ratio test that is “predictive of a true positive as determined for the particular assay, as defined by the CDC\textsuperscript{25}.” The signal to cut-off ratio testing tends to be much cheaper than the RIBA or NAT tests, and is performed by the state public health lab in Utah for hospital and clinics around the state\textsuperscript{23}.

In the jail the testing is opt-in at intake, as opposed to opt-out at release in the prisons. The clients upon being booked into jail have to wait in a holding cell for 24 hours and are asked by the guard if anyone would like to go to see the health department, where they are offered HCV screening regardless of risk factors. Per funding requirements for universal screening, each inmate that chooses HCV screening goes through a complete risk analysis. This data is being analyzed to paint a better picture of demographics and risk behaviors of anti-HCV positive persons in the correctional setting\textsuperscript{23}.

Health educators in the jail perform testing and education for the program, no licensed staff are involved. All positive HCV antibody clients are educated about what the infection means for their bodies. In addition, each positive client is given a
comprehensive resource guide to take with them that includes primary care referrals, mental health referrals, vaccination referrals and a vaccination record, and counseling and support information. In addition to community referrals there is a project ECHO program in Utah that has a 1-800 number to assist people looking for primary care referrals. Erin reports that after the counseling and education session most individuals with a positive test are not demanding confirmatory testing and are usually very calm about taking next steps in the community. She does note however, that the King County Correctional Facility would probably need the ability to offer some confirmatory testing for those who request it, or if it is indicated by an uncertain result. In her experience state lab pricing is the best for confirmatory tests.

In the year-end report for 2012 the project-wide the anti-HCV positivity rate was 9.72% or (137 of 1410 tests were anti-HCV positive). The positivity rate for Chlamydia and Gonorrhea was 4.9% and for HIV was 0.7%. In the single jail where testing was provided (Davis County Jail) there were 56 out of 735 individuals who tested positive for HCV (positivity rate of 7.62%) while no new HIV infections were found. Erin estimates an overall prevalence of HCV positive antibody inmates in Utah jails is somewhere between 10-20%- slightly conservative when compared to CDC nationwide estimates.

Deschutes County Jail Testing Program – Oregon State Jail Testing

Interview with Judith Leahy MPH, Adult Viral Hepatitis Prevention Coordinator Oregon State

This program was initiated by the Deschutes County Public Health HIV/AIDS Prevention staff members, and supported by the Oregon HIV Prevention program and the Adult Viral Hepatitis Prevention Coordinator (AVHPC). The local health department approached the jail in 2005 about initiating HIV antibody screening. Rapid HCV screening was requested in 2009, and was implemented in 2011 along with HIV and HCV education groups for interested inmates. In 2012, the program switched from the Home Access HCV screening kit with a two-week turnaround to the OraQuik Rapid HCV screening test, which takes 20 minutes to complete. HBV vaccinations through the County Immunization Program were also made available to the jail inmate population in 2012 with follow-up vaccinations available at the health department or for those who were re-incarcerated in the jail. The adult HBV vaccinations delivered in the jail setting are entered into the state’s electronic Immunization Registry.

It was critical for the Oregon Health Authority to get buy-in from the Jail administration, health and custody staff for this program. The HIV Program was able to provide HIV screening tests through its CDC HIV Prevention Program funding, although the Viral Hepatitis Prevention Program was not able to use federal funds for screening tests. Funding for HCV testing was carried over from various projects to get the HCV screening off the ground. As the funds were carryover and special project funds, the HCV screening component of the program has struggled to find a stable funding source.

2 See appendix for Utah Jail and Prison Testing Program Community Referrals
for HCV screening tests. However, there were initially County health department staff members (disease intervention specialist and a vaccine coordinator) working for the program conducting the testing, education, and vaccinations in the jail during this time. The program cost to the jail was primarily scheduling and custody staff time. The screening and vaccination activities are opt-in, but targeted to intravenous drug users only. Overall, the program emphasizes a harm reduction strategy for participants.

Participants were able to request services or were recruited by custody and medical personnel in the jail based on their risk factors. Potential participants also learned about the program through flyers in the jail and word of mouth from other inmates. The local health department supplied the disease intervention specialists and immunization nurses for the program. The Oregon Health Authority HIV and Viral Hepatitis Prevention programs supplied the testing kits, and the Immunization Program supplied HAV and HAB vaccinations.

Currently, due to HIV Prevention Program funding decreases, the program is run through volunteers. A group of local veterans (relatable lay health advocates for the jail population) stepped forward to continue the screening program in the jail. The volunteers are trained to give HIV/HCV education and risk reduction presentations, one-to-one risk reduction counseling sessions and administer the rapid HIV and rapid HCV screening tests.

Currently, the anti-HCV testing is a universal opt-in screen, and because of the success of the volunteers to recruit participants, they are currently screening more people who are not identifying HCV risk factors. This poses a financial problem, as their carry-over funding has been used. Inmates who are bound for drug court and prison can request HIV and HCV screening at prison intake in Oregon. There is talk of making the program targeted to those who identify risk factors.

One of the challenges to implementing the HCV screening tests was the concern by jail administration that they would be responsible for providing HCV treatment, which can cost over $50,000 per case. The program was able to discuss with the jail that most people with chronic HCV infection are asymptomatic, that most people with chronic HCV infection are not in immediate need to treatment and that the jail was already required to provide medical care for inmates with symptomatic infections of any kind. It was determined that the chances of discovering a chronic case of HCV that required treatment during the person's jail time was minimal.

There is no formal case management currently for participants found to have chronic HCV infection, although there is a Federally Qualified Health Care Facility nearby where the program staff have referred antibody positive inmates for follow up testing and treatment at low or no cost. Ms. Leahy points out that when looking into grant funding for a program like this you need to be able to provide reasonable connection to ongoing medical monitoring and care for persons with and without medical insurance, Medicare or Medicaid, which proved difficult in rural Oregon.

The Deschutes County Jail is a rural jail that was designed for 318 beds, and saw 6,017 bookings in 2011. The jail oversees “court security, inmate transport, probation and parole supervision services, inmate programs, and alternatives to incarceration programs.”
The average age of program participants in 2011 was 32 years old, over half of them were Caucasian. 85% of participants reported previous time spent in jail. The program evaluation found that inmates entered the jail knowing slightly less about HCV than HIV infection but increase their knowledge of both viruses to the same level upon completion of their educational sessions.

An association was found between reported prison sentence served and HIV or HCV testing previous (the prison tests for both viruses), and in those who were detained or jailed six or more times reporting very high risk behaviors. An association was also found between those reporting very high-risk behaviors and prison time. However, no association was found between being detained or jailed six or more times and recent HIV or HCV testing. Likewise, no association was found between very high risk behaviors and HIV or HCV testing.

The data from the Deschutes testing program provides further justification for jail testing as we see that individuals who are reporting very high risk behaviors for HCV and HIV are also those who are most likely to be high utilizers of jail services. This gives the jail more opportunities among the individuals at highest risk to intervene and follow up regarding vaccinations, confirmatory testing, drug treatment, clean injection practices, and primary care referrals.

The use of lay health advocates to sustain the program is also a model to consider, particularly in the absence of direct funding.

As in the case of the Utah jail testing program we see that being armed with information about the nature of Hepatitis was crucial to get buy in from correctional staff.

Viral Hepatitis Prevention and Outreach Program- Snohomish Health District, WA
Interview with Kathy Perkins LPN Disease Intervention Specialist- Snohomish Health District Viral Hepatitis Prevention and Outreach Coordinator

There has been a long-standing relationship between the health district and the jail in Snohomish County. In the 1970s the health director of the Snohomish Health District was also the medical director in the county jail, so testing for HIV and STDs were being performed early on. The current Viral Hepatitis Prevention and Outreach Program (VHOP) began in 1998 as a grant funded position for a part time LPN for the TB program who also did outreach at the needle exchange and the jail. The VHOP is now a stand-alone program with one full time employee that is funded out the Snohomish Health District’s general fund. The Snohomish Health District also employs HIV disease intervention specialists who do not focus on viral hepatitis but refer clients to VHOP as needed.

Currently the VHOP offers testing for Hepatitis A, B, C, and HIV as well as vaccinations for HBV, HAV, Twinrix, Influenza, and Tdap. The program is targeted towards intravenous drug users and their sex and injecting partners. The program will occasionally see jail inmates from KITES, or from a nurse referral for those who do not meet the target criteria.

The rapid testing kits used for HCV testing, and the Twinrix vaccinations are provided by the Washington State Department of Health from the Adult Viral Hepatitis
Coordinator Anne Brenner. Other vaccinations are provided on a sliding fee scale to program participants\textsuperscript{30}. The program does not offer confirmatory DNA testing for HCV and refers antibody positive clients to the county’s community clinics for follow up DNA testing when indicated. Unfortunately, even on a sliding scale the confirmatory DNA testing runs $300 per test\textsuperscript{29}. In 2012 the program began using rapid antibody testing with a signal to cut off ratio component built in the rapid test. This helps eliminate false positives but is not a true confirmation of disease\textsuperscript{30}.

There is no formal advertising for the program in corrections, however they do advertise on the health district website, Facebook and at other outreach locations. Ms. Perkins is the only employed person doing the education and outreach in the jail and five other locations around the county. She conducts outreach at the needle exchange, drug treatment facilities, homeless shelter, the juvenile justice correctional facility, and tribal behavioral health. Being in the community and the jail increases knowledge of her programming and keeps her very busy\textsuperscript{29}.

Ms. Perkins has access to the medical records from the jail just to chart the services she provides. Ms. Perkins performs her own follow up with individuals who have been released and need vaccinations, those who need to see a primary care provider, and those who need confirmatory testing. Having access to daily jail bookings allows her to follow up with patient-inmates who have been re-booked in jail, as well as trying to reach those released in the community from their provided contact information\textsuperscript{29}.

The 2011 year-end report on the VHOP provides a detailed glimpse at the population and their drug use behaviors. The program served a total of 256 clients with 362 service encounters\textsuperscript{30}. The average duration of reported drug use was 49.7 months, the vast majority of which was heroin use with a slight uptick in methamphetamine use in 2011 as compared to 2010\textsuperscript{30}. 80% of VHOP participants had reused drug paraphernalia\textsuperscript{30}. Less than 9% of participants had never been to drug treatment, with the majority having attempted treatment at least once\textsuperscript{30}. The majority of VHOP clients, 47.7\%, are serviced in the Snohomish County Jail. The total anti- HCV positive rate for all program participants was 35.2% in 2011, more than double the percent of the second most prevalent viral infection, anti-HAV at 13.6%. No cases of HIV were detected through antibody testing in this year\textsuperscript{30}. 20.0\% of anti-HCV positive clients were being followed by a primary care physician, and 3.3\% had initiated HCV treatment\textsuperscript{30}.

There is no evidence from the VHOP that contact with the program has increased participants likelihood to access drug treatment programs in the area. Although this may be due to the elimination of a voucher program for free or reduced cost treatment. Opiate treatment facilities in the county, even those that do not use medication substitution, have long wait lists\textsuperscript{29}.

In the jail Ms. Perkins educates her clients on how hepatitis is transmitted, how to reduce their risk, and what the hepatitis virus does to the body. She offers vaccinations at this time, and for patients at outreach locations other than corrections, gives each participant a $5 Safeway gift card for each completed vaccination. She informs her clients that they will receive a $5 gift card for each vaccine, and gives them information on where and when to find her at the needle exchange or the health
department. She believes this incentive has been somewhat successful in encouraging repeat vaccinations. She does not use the accelerated schedule for Twinrix vaccination and states that most of her clients are in jail long enough, or return to jail often enough to get at least 2 doses of vaccination using the standard vaccine schedule.

Currently Ms. Perkins tests for HAV and HBV before selecting a vaccination recommendation for her clients. However, she is considering stopping the HAV and HBV testing because of the extremely low prevalence, and considering only offering HCV rapid testing in conjunction with Twinrix vaccinations.

Ms. Perkins’ advice to King County Correctional Facility was to have a really dedicated staff person to take this on. She is a one person testing program for a correctional population of 1000-1200 per day, this may indicate that KCCF would need more than one person to successfully test in the jail. She also indicated there may be a benefit in potentially limiting screening to those who will be in jail long enough to receive two doses of vaccine and the results of a PCR test if needed.

The VHOP is an extraordinary example of another coordinated effort to intervene with the intravenous drug using population in jail as well as the community. This program stands out from the others in the level of community outreach that is provided to program participants. The program is meeting the population where they are in multiple locations across the county.

The VHOP collects comprehensive data about the intravenous drug using populations served. Everything from past prescription drug use, gang involvement, paraphernalia sharing, and homelessness are tracked in program participants, painting a much more detailed picture of a population that is often hard to reach.
Section III. Chart Review of Individuals Reporting Known Hepatitis Infection in King County Correctional Facility and the Maeling Regional Justice Center

Background

The Centers for Disease Control and Prevention (CDC) estimate that between 2.7 - 3.9 million individuals in the United States are currently infected with hepatitis C\textsuperscript{14}. It is estimated that only 800 of 17,000 new cases of viral hepatitis c were reported in the US in 2010\textsuperscript{31}. The CDC also estimates that 75% of unknown hepatitis c infections occur among persons in the “birth cohort” or “baby boomer” generation born between 1945-1965\textsuperscript{14}.

Intravenous drug use has long been established as a strong risk factor for anti-HCV positivity, as well as incarceration and increasing age\textsuperscript{15}. It is estimated that 29% - 43% of all individuals living with hepatitis c in the United States are released from a correctional facility each year\textsuperscript{15}.

A secondary data analysis of four studies (RAVEN, RAVEN II, KIWI, and CIDUS III/DUIT) examining HCV prevalence in Seattle’s Intravenous Drug Using (IVDU) population from 1994-2004 found a decline of HCV prevalence among IVDU from 68% to 32%\textsuperscript{32}. However, the only significant decline was seen in the RAVEN study population which recruited participants from five drug treatment centers, two social service agencies, one drug detoxification center, and from persons entering KCCF on drug related charges. Significant risk factors for anti-HCV positivity included older age, lower educational attainment, number of years injecting drugs, injection frequency, and a history of sex work in females\textsuperscript{32}. A significant association between anti-HCV positivity and incarceration was found in the RAVEN study\textsuperscript{33}.

The association between incarceration and anti-HCV positivity in the RAVEN study led to the KIWI study of incarcerated intravenous drug using individuals in KCCF and the Maeling Regional Justice Center (RJC)\textsuperscript{33}. The KIWI study represents the most in-depth picture of incarcerated injection drug users who are anti-HCV positive in King County. 65% of KIWI participants were anti-HCV positive of which 39% were aware of previous anti-HCV positive results\textsuperscript{33}. There appears to be little cross-over between individuals at high risk for HIV infection (men who have sex with men) and high risk for HCV infection (intravenous drug users) in King County\textsuperscript{33}. Only 7% of males identified as homosexual or bisexual in the KIWI study, while 12% overall reported ever having sex with another man\textsuperscript{33}. 61% of male study participants who did not have sex with men but injected drugs were anti-HCV positive\textsuperscript{33}.

Among those who reported injecting drugs in the last six months 25% reported injecting with 10 or more different people, and in Seattle at KCCF, 61% of respondents reported injecting with a shared syringe\textsuperscript{33}.

The mean age of participants enrolled in the study was 35 years, 77% of participants were male and 64% were white. 88% of participants resided in Seattle, 60% had no permanent residence before being booked into jail and 25% had not completed high school\textsuperscript{33}. 68% of study participants were unemployed, nearly half of all participants...
had no income whatsoever, and approximately 25% were receiving government assistance\textsuperscript{33}.

**Methods**

Marietess Koslosky of Jail Health Services Pubic Health Seattle & King County pulled data for the chart review from the PEARL electronic medical records system. A “special populations” report for 2012 was run for both KCCF and RJC facilities from the patient’s problem lists. Charts were pulled into the data set if one of the following hepatitis related ICD9 codes was listed on the problem list: 070.10 (viral hepatitis a without hepatic coma), 070.30 (viral hepatitis B without hepatic coma, acute or unspecified, without mention of hepatitis delta), 070.51 (acute hepatitis c without mention of hepatic coma), 070.54 (chronic hepatitis c without mention of hepatic coma), 070.9 ( unspecified viral hepatitis without mention of hepatic coma).

The data was re-coded numerically in Microsoft Excel and imported into STATA statistical analysis software. Data from the chart review was then compared to the 2012 King County Department of Adult and Juvenile Detention’s Detention and Alternatives Report when applicable.

**Results**

Characteristics of inmates reporting any type of hepatitis infection at their initial health assessment in 2012, all facilities combined. *N* = 394

<table>
<thead>
<tr>
<th>Table 1. Inmates reporting known hepatitis infection</th>
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<tr>
<td><strong>Age</strong> <em>n</em>= 394</td>
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<tr>
<td>Mean (95% Confidence Interval)</td>
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<tr>
<td>47 years (46.1 -48.0)</td>
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<tr>
<td>**Sex (%) <em>n</em>= 393</td>
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<tr>
<td>2.6</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>3.1</td>
</tr>
<tr>
<td>Declined to respond</td>
</tr>
<tr>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>5.4</td>
</tr>
<tr>
<td>**Length of Stay <em>n</em>=390</td>
</tr>
<tr>
<td>Mean (95% Confidence Interval)</td>
</tr>
<tr>
<td>59.5 days (47.8 – 71.3)</td>
</tr>
<tr>
<td>IQR</td>
</tr>
<tr>
<td>4-59</td>
</tr>
<tr>
<td>**Reported Hepatitis Infection (%) <em>n</em>= 394</td>
</tr>
<tr>
<td>HCV</td>
</tr>
<tr>
<td>90.6</td>
</tr>
<tr>
<td>HBV</td>
</tr>
<tr>
<td>7.1</td>
</tr>
<tr>
<td>HAV</td>
</tr>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>Unspecified</td>
</tr>
<tr>
<td>1.8</td>
</tr>
</tbody>
</table>
Individuals reporting hepatitis infection at their health assessment are older in age (average age is 47 years (95% CI 46.1- 18.0)). Those with known hepatitis infection are overwhelmingly male and white. The majority of reported hepatitis infections are hepatitis c either acute or chronic as classified by the ICD9 codes from inmates’ problem lists. These findings are consistent with previous findings among studies conducted on the IVDU population in Seattle; those with hepatitis tend to be older, white, and male in this region.

The median age of those who were aware of exposure to hepatitis in KCCF and RJC in 2012 was 10 years older than studies conducted in 2000\textsuperscript{33}. This finding may be consistent with the Centers for Disease Control and Prevention’s “birth cohort theory” which asserts that the majority of undiagnosed chronic hepatitis c infections in the United States occur among adults born between 1945-1965\textsuperscript{14}.

<table>
<thead>
<tr>
<th>Characteristics of inmates reporting any type of hepatitis infection at their initial health visit in 2012 by facility. N= 394</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 2.</strong></td>
</tr>
<tr>
<td><strong>KCCF</strong></td>
</tr>
<tr>
<td>Age (%)</td>
</tr>
<tr>
<td>&lt; 30</td>
</tr>
<tr>
<td>31-40</td>
</tr>
<tr>
<td>41-50</td>
</tr>
<tr>
<td>51-60</td>
</tr>
<tr>
<td>60+</td>
</tr>
<tr>
<td>Sex (%)</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Race (%)</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>Declined to Respond</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Length of Stay</td>
</tr>
<tr>
<td>Mean (95% Confidence Interval)</td>
</tr>
</tbody>
</table>

RJC inmates reporting known hepatitis are more likely to be in the 41-50 and 51-60 age groups while the majority of reported hepatitis cases at KCCF are spread out between the 31-60 age groups.
Length of stay for inmates reporting hepatitis was extremely variable. However, the highest variability is seen among inmates at RJC. Variability in length of stay is a well documented problem for patient care in jail health services around the nation.

Percent characteristics of inmates reporting known hepatitis infection at their initial health assessment in 2012 by ICD9 code, all facilities combined (row). n =394.

<table>
<thead>
<tr>
<th>Table 3.</th>
<th>N= 394</th>
<th>Chronic HCV Dx code=070.54</th>
<th>Acute HCV Dx code= 070.51</th>
<th>HBV Dx code= 070.30</th>
<th>HAV Dx code= 070.10</th>
<th>Unspecified Dx code= 070.90</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male N=313</td>
<td>80.2</td>
<td>10.2</td>
<td>7.7</td>
<td>0.6</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Female N=80</td>
<td>80.0</td>
<td>11.3</td>
<td>5.0</td>
<td>0.0</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td><strong>Age (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;=30 N=23</td>
<td>69.6</td>
<td>13.0</td>
<td>4.3</td>
<td>0.0</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>31-40 N=76</td>
<td>71.1</td>
<td>14.5</td>
<td>10.5</td>
<td>2.6</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>41-50 N=133</td>
<td>79.7</td>
<td>12.0</td>
<td>6.8</td>
<td>0.0</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>51-60 N=137</td>
<td>85.4</td>
<td>6.6</td>
<td>7.3</td>
<td>0.0</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>60+ N=25</td>
<td>88.0</td>
<td>12.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td><strong>Race (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White N=277</td>
<td>80.5</td>
<td>10.8</td>
<td>6.9</td>
<td>0.0</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Black N=70</td>
<td>82.9</td>
<td>8.6</td>
<td>5.7</td>
<td>1.4</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Asian N=10</td>
<td>50.0</td>
<td>20.0</td>
<td>20.0</td>
<td>10.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td><strong>Facility (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KCCF N=255</td>
<td>78.0</td>
<td>10.6</td>
<td>8.2</td>
<td>0.8</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>RJC N=139</td>
<td>83.5</td>
<td>10.8</td>
<td>5.0</td>
<td>0.0</td>
<td>0.7</td>
<td></td>
</tr>
</tbody>
</table>

Once again, males and those of increasing age are more likely to self-report known HCV infection. White and Black inmates are nearly equivalent in reporting HCV infection. HAV was the least reported hepatitis infection in 2012. Inmates under 30 appear to be less likely to know which hepatitis virus they have tested positive for.
Discussion

While it was not possible to compare all of the demographic features and risk factors of those who were anti-HCV positive in Seattle studies from the 1990s and early 2000s, there appear to be some consistencies. Those reporting known hepatitis infection still appear to be primarily white, male, and older in age. The vast majority of known reported infections are hepatitis c, indicating a drug injecting population. Those reporting known hepatitis infection (n=394) in 2012 only made up 1.2% of the total unique bookings from 2012 (n=33,508).34

There does appear to be some differences between the population identified in this chart review (unique individuals with known hepatitis infection at booking) versus the total jail population in 2012. The Department of Adult and Juvenile Detention’s 2012 Detention and Alternatives Report points to a much younger overall population (even when those under 18 are excluded). Of unique individuals in custody in 2012 among all facilities 22.7% were between the ages of 18-24, 34.3% were between 25-34, and 21.5% were between 35-44.34 By comparison, those reporting known hepatitis infection at booking were most likely to be over 30 with the highest percentages of reported hepatitis in the 41-50 and the 51-60 age groups.

The sex differential is almost identical between total unique persons in custody in 2012 (80.3% male, 19.6% female) versus in the chart review (80.0% male, 20.3% female).34 Race demographics were also similar between the total population (white 62.3%, black 27.0%) and those reporting known hepatitis infection in the chart review (white 70.0%, black 18.0%).34

Limitations

There is no way to confirm chronic hepatitis c infection from this self-reported data. At best we can assume that persons reporting known hepatitis c infection have tested antibody positive for HCV at some point in their lives. It is still important to note how many individuals have been exposed to the virus. Exposure to HCV has been strongly correlated with risk-taking behaviors, particularly injection drug use, even if an individual is not currently infected.
Section IV. Recommendations for Implementing an HCV Screening Program in King County Correctional Facility

The Centers for Disease Control and Prevention and Institute of Medicine recommend HCV testing and HAV/HBV vaccinations be offered in correctional settings\(^3\text{,}13\). Partnerships between community health and public health clinics are also recommended to improve continuity of care and increased access to comprehensive viral hepatitis services among incarcerated populations\(^3\). However, the funding and implementation mechanisms needed for jails to initiate a screening program have not been outlined\(^3\text{,}16\).

The sheer number of high-risk individuals who come in contact with a correctional setting each year may indicate jails as a more efficacious point for identifying unknown HCV infections than traditional outreach locations. Many jail inmates are not regularly accessing a primary care provider making the jail an important point-of-care location. While the USPSTF found little evidence of the efficacy of encouraging decreased risk behaviors among HCV infected PWID from counseling, the jail still provides an opportunity to address structural issues in an individual’s life that may be increasing risk-taking behavior and exacerbating hepatitis infection (addiction, homelessness, mental illness, lack of insurance or primary care).

Another Opportunity to Encourage Primary Care Seeking Behavior

There is some evidence to suggest that even among prisoners, where there is more time to establish relationships and discharge plans, that “standard of care” discharge planning at release is just as effective at increasing post-release care seeking behavior as intensive case management\(^35\). KCCF’s Jail Health Services (JHS) has found a significant decrease in recidivism among inmates with co-occurring substance abuse disorders and medical problems when counseled by JHS release planners\(^36\). Providing HCV screening and HBV/HAV vaccinations in KCCF provides an opportunity to encourage care-seeking behavior upon release and deliver important counseling messages around drug and alcohol use. It also offers an opportunity to identify more eligible individuals for the successful release planning services already provided by JHS.

Outline of a Screening Program - Best Practices, Options to Consider

Below is an outline of a targeted opt-in risk-based HCV screening and vaccination program that could be implemented at KCCF. This design was chosen for a number of reasons. While there is compelling evidence for testing individuals in the “birth cohort” the best evidence indicates injection drug users in Seattle as the most HCV affected population. Offering testing services to anyone with a history of injection drug use and “birth cohort” members may overwhelm staff and resources with little cost-benefit. However, KCCF may consider expanding a screening program to include members of the “birth cohort” in the future as evidence becomes more available and/or the systems in place for HCV screening become well established.
The rapid screening test presents a 20-minute opportunity for delivering key counseling messages about hepatitis. These recommendations outline a counseling strategy based in social-cognitive theory. Health behavior change methods based in social-cognitive theory, like motivational interviewing, are regarded as highly efficacious at affecting health behavior change in clinical settings. It is highly recommended that the individual conducting HCV testing and counseling sessions be trained in motivational interviewing techniques.

Training by and coordination with the release planning staff is also recommended as they have had success in reducing recidivism and are familiar with local resources. There may also be opportunities to coordinate with release planners for addressing the needs of anti-HCV positive patient-inmates, as the release planners are able and interested in being involved.

In researching other HCV jail screening programs it is obvious that there are multiple approaches used, none of which are necessarily better than the others, but adapted to suit the specific correctional environment. Outlined below is an opt-in screening program that would be offered to inmates at booking by the RN taking their initial health assessment. Inmates who elect for testing would then be referred to the LPN in charge of HCV screening. Testing and counseling at release provides an opportunity to give inmates information that will be fresh in their minds upon release into the community, and the creation of a small release plan related to factors affecting their hepatitis status.

**Aims of an HCV Screening Program at KCCF**

1. Reduce recidivism among HCV at-risk patient-inmates by linking them with primary care and other essential services.
2. Reduce patient-inmate morbidity and mortality from hepatitis.
3. Foster partnerships with community providers to create strong linkages to primary care for patient-inmates.
4. Collect and present data on the screening program to demonstrate need and hopefully increase funding streams, future program expansion and awareness of this pressing issue.

**Opt-in Targeted Rapid Screening at Release**

1) **Staffing**
   a. Start with one FTE. A LPN to test, vaccinate, counsel, refer, collect patient data and perform follow up as needed.

2) **Identifying Candidates for Screening**
   a. Inmates offered testing by nurses at booking if they are arrested on drug related charges and/or answer yes to current or former IV drug use. Referred to LPN if they opt into screening.

3) **LPN Testing /Counseling Sessions**
a. LPN has access to EMR records and either a report is run every day to find charts that are flagged for HCV testing or vaccination, or nurses task LPN patient charts who indicated wanting testing.

b. LPN accesses patients on the list at the time of their release to run the test, provide vaccinations as needed, and deliver counseling and referral messages as appropriate. This may require cooperation with DAJD to know when release occurs and it should be noted that not all patients requesting testing will be able to see the LPN depending on time of release.

Notes on Counseling Sessions
This may be the most important component of the screening program. It is not enough to simply increase awareness about HCV transmission and risk factors. An effective counseling session should include an evaluation of the patient-inmate’s self-efficacy, social supports, and help the patient-inmate to set realistic achievable goals to reduce risk behaviors. “Don’t inject drugs” is not likely to result in decreased risk behaviors or increases in health-seeking behaviors. Motivational interviewing is one of many possible clinical counseling techniques that could be used to address issues around ambivalence and self-efficacy while delivering key counseling messages about hepatitis and the liver. Motivational Interviewing is recommended because it has shown significant positive effects in the treatment of alcoholism, obesity, and psychological conditions.

4)  Rapid and Confirmatory Testing
   a. Rapid HCV antibody testing kits and Twinrix vaccinations should be used. Look to Washington State Viral Hepatitis Coordinator Anne Brenner to see about state funded testing kits and vaccines.
   b. KCCF will need the ability to offer confirmatory testing for patient-inmates who request it or have longer stays.

5) Follow Up
   a. LPN can follow up with patients who are re-booked regarding an anti-HCV positive test, vaccination schedules, drug treatment and PCP referrals.
   b. LPN follows up with patients on confirmatory test results run by the jail.

Notes on testing
HCV RIBA and NAT testing are typically considered the confirmatory tests for HCV infection. However, the CDC and Washington State Hepatitis C Strategic Plan outline the laboratory criteria for HCV diagnosis as: a positive rapid antibody HCV test with a signal to cut-off ratio test “predictive of a true positive for that assay as defined

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3 See appendix for more information on the CDC and Veterans Administration recommendations for counseling messages.
by CDC guidelines” OR a recombinant immunoblot assay OR a nucleic acid amplification test\textsuperscript{39-41}. The signal to cut off is often cheaper than the RIBA and NAT tests and eliminates false negative results\textsuperscript{40}. Less than 5 out of 100 persons who meet the criteria for diagnosis as outlined by the CDC from signal to cut-off ratio testing will be false positives\textsuperscript{40}. For a transient population where treatment will not be initiated before other structural factors are addressed, the signal to cut-off provides enough evidence to prioritize drug treatment and/or primary care seeking behavior. When an individual is ready to initiate treatment, a RIBA or NAT test would be indicated.

KCCF may consider using the signal to cut-off testing as a vetted and acceptable test for diagnosis when brokering a deal with a lab. The Washington State Public Health Lab does not currently offer any hepatitis testing services, despite the fact that it is a notifiable condition. KCCF may consider working with the state prison system to create a client base for the state lab to consider offering HCV confirmatory testing. State labs often offer lower rates than private labs, and may be necessary to secure grant funding for the screening program, if needed.

Notes on vaccinations

In healthy adults 40 years old or younger the HBV vaccine produces a protective antibody response in 30%-55% of individuals after the first dose, 75% after the second dose, and over 90% after the third dose. For individuals over 40 years of age the proportion of people who achieve the protective response after the third dose declines below 90%, and for people over 60 years of age protective levels are only seen in about 75% of those who complete the series\textsuperscript{42}. Precise spacing between the first and second doses has not been proven to have an affect on efficacy and the accelerated vaccine schedule is just as effective as the traditional 0,1,6 month schedule\textsuperscript{42}. The third vaccination is considered primarily a booster for longer term protection\textsuperscript{42}.

The CDC and American Association for the Study of Liver Disease recommend universal hepatitis b vaccination as a preventative measure in correctional settings. The CDC considers the immune response rate for first and second doses “high” and “modest” enough to justify vaccinations in correctional settings even if inmates are not able to complete the full series. They recommend giving inmates a copy of their vaccination record and referrals to community and public health clinics where they can complete the series\textsuperscript{16}. Repeat offenders who are booked repeatedly at KCCF may be able to receive 2-3 doses of vaccine in an accelerated vaccination schedule.

Washington State’s Immunization Information System is used by 98% of providers in the state, including pharmacies and outreach locations. KCCF can register with the online database free of charge and access immunization records for virtually anyone who has ever received a vaccination in Washington\textsuperscript{43}. The vaccine registry used to be for children only and was called “Child Profile.” As the system was recently adapted for adults there are many adult vaccinations that are not logged, but with continued high rates of provider participation adult vaccination schedules should be readily available in the future.

\textsuperscript{4} See Appendix I for information on using signal to cut-off ratio testing for HCV diagnosis.
5) Inmates with Extended Stay
   a. In some rare cases of extended stay it may be indicated to initiate treatment in the jail.
      i. Should be coordinated with PCP for release or prison system.
      ii. Adhere to AASLD guidelines for when to initiate treatment.
      iii. Confirmatory testing and liver function testing would be needed—a liver biopsy is not typically indicated to begin treatment.

6) Inmates who are Booked Repeatedly
   a. Present an opportunity for LPN to follow up with counseling messages—confirmatory testing, vaccinations and primary care referrals.

7) Inmates with Acute Hepatitis
   a. Follow current clinical practice guidelines for inmates who present with jaundice and other acute symptoms of hepatitis.

Notes on Treatment
   Unlike HIV, persons with chronic hepatitis C are not indicated to begin drug therapy immediately. Current drug therapies require strict adherence, produce aversive side effects, and are not 100% effective. It is an unfortunate reality that the vast majority of those infected with HCV in the US often lead chaotic and transient lives. The discovery of an anti-HCV positive result in a jail setting represents the first step in a journey towards treatment for those who turn out to be chronically infected. There are many larger structural issues in a patient-inmates life that are going to impede the adoption of health-promoting behaviors to facilitate the successful completion of HCV treatment. Accessing health insurance and Medicaid, getting in with a primary care provider for consistent monitoring and management, accessing drug treatment, and solid employment and housing situations are all basic issues that will often supersede the need for HCV treatment in this population. Yet, without addressing these larger issues the likelihood of successful treatment is low.
Section V: Community Collaboration/Continuation of Care

Proper continuation of care among individuals with positive anti-HCV tests is a primary concern for JHS. While the jail is not an appropriate place to initiate treatment due to limited lengths of stay, many jail screening programs felt they have met their obligation to care for antibody positive individuals by having strong community referrals. Rapid antibody screening and the counseling session that goes with it, provides an opportunity to reach a historically hard to reach population, injection drug users. There is also potential to reduce this populations historical high rates of re-incarceration by connecting them with community resources. An antibody screening program should seek to identify individuals engaged in high-risk behaviors that need consistent medical monitoring and then troubleshoot how to connect them with appropriate care in the community.

Many of the jail screening programs researched for this paper take the issue of coordinating community care very seriously. The HCV Continuity Program in New York and the Viral Hepatitis Outreach Program in Snohomish Washington provide excellent examples of strategies a correctional setting can take to ensure care continuation. KCCF is particularly well suited to this task as King County boasts a wealth of resources and providers for collaboration.

The model of the HCV continuity program could be adapted for KCCF. While this may seem out of the scope of JHS practices it certainly is not out of the scope of Public Health Seattle & King County. Enlisting a group of local providers for referrals would greatly increase the chances of continuing care. Providers would need to be assessed for their knowledge of HCV disease monitoring and progression, as well as their willingness to accept new Medicaid clients and ability to meet the unique needs of correctional populations. Some area-wide training may be required to link providers into a network for HCV treatment and care. While the Harborview Liver Clinic should be the last stop in a patient’s journey through HCV treatment, Harborview staff may provide great resources for training local providers in hepatitis care and how to assess if a patient is ready to initiate treatment. Project ECHO staff in Seattle may also be willing to collaborate in training local providers.

KCCF may consider contracting a local agency like the Hepatitis Education Project (HEP) to conduct follow-up and outreach with former inmates in the community. HEP could help anti-HCV positive released inmates access care, drug treatment and Medicaid coverage. HEP is a standout program in the area committed to helping individuals affected by viral hepatitis. HEP is currently in the jail multiple times a month delivering counseling messages to inmates about HCV transmission and disease progression. HEP offers on-site testing and vaccinations just down the street from KCCF in Pioneer Square. This year HEP launched two projects that may be of great assistance to KCCF in initiating a jail screening program: The National Hepatitis Corrections Network and a hepatitis case management program.

Potential collaborations could include: contracting HEP for training program staff on delivering hepatitis counseling messages and effective communication strategies for
incarcerated individuals or HEP can be a referral for off-site case management and follow up vaccination.

The Affordable Care Act- Increasing Linkages to Care for those with Chronic Conditions

With the implementation of the Affordable Care Act in 2014 we expect to see some confusion among providers and patients, but overall it is expected that more individuals will have access to primary care services for free or low cost. In particular, single individuals without serious disabilities whose yearly incomes are below 133% of the federal poverty level will be eligible for Medicaid\textsuperscript{45}. As seen in the KIWI study, many of the incarcerated individuals at KCCF with positive antibody HCV tests met these criteria and are currently ineligible for Medicaid.
Section VI. Surveillance and Grants- Something to Consider

Adding to the body of data on HCV infection among incarcerated individuals was not intended to be a focus of a jail HCV screening program at KCCF. Providing good care to patients is the top priority of JHS staff, which prompted a closer look into HCV screening and care in correctional settings. However, while testing kits and vaccinations themselves may be acquired free of charge through the state, and signal to cut-off ratio testing could save money in lieu of more expensive diagnostic tests. Implementation of a screening program would most likely necessitate a new FTE position at JHS in addition to some potential contracting work as outlined above. In anticipation of severely limited public health funding, grants through the CDC should be seriously considered as a means of getting the program off the ground.

CDC grants often require extensive data collection and surveillance for grant approval. Many jail testing programs noted that showing a best effort to connect inmates with care were also critical in accessing grant monies for a screening program. While data collection does not need to be the sole focus of the program, a solid built-in program evaluation will help assess the efficacy of the screening program. If implemented, KCCF would be home to the largest jail HCV screening program in the nation. Surveillance data for such a large population would surely deliver invaluable contributions to our understanding of this vulnerable population. Data from a program with a focus on community collaboration and continuity of care could serve as a model for jails nationwide and help curb the morbidity and mortality experienced from HCV.

With the upcoming release of more effective and acceptable drug treatments in conjunction with increased linkages to care with the Affordable Care Act, the United States stands well poised to seriously reduce HCV related morbidity and mortality. Targeting vulnerable populations who are disproportionately affected by HCV in correctional settings and elsewhere is the key to eliminating HCV as a serious public health problem in the United States.
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42. Prevention CfdCa. A Comprehensive Immunization Strategy to Eliminate Hepatitis B Virus Infection in the United States: Reccomendations of the Advisory Committee on Immunization
Appendix

Figure 1. Materials from Jail and Prison Testing Programs

How to get information and help...

For more information about hepatitis, call the CDC Hepatitis Hotline:
1-888-232-HEP (1-888-232-4377)

To find out information about HIV and AIDS, or to find HIV testing sites, call:
1-800-541-AIDS (English)
1-800-222-SIDA (Spanish)
1-800-369-AIDS (Deaf/TDD)

For help quitting or reducing alcohol or drug use, call:
1-800-522-5155 (Monday – Friday, 9 AM to 5 PM)
1-800-LIFENET (New York City only – 24 hours a day)

Other Information:

Para/Officer: ________________________________
Doctor/Hospital: ________________________________
Support Services: ________________________________
What You Need to Know

By now, you have begun treatment for hepatitis C. Hepatitis C is an illness that damages the liver. It is very important that you keep up with your treatment. While on treatment, you must keep your doctor appointments and follow all instructions given.

Keeping your appointments is not always easy. If you are having problems with this, talk to your Parole Officer. Your Parole Officer may be able to assist with locating support and assistance with needed services. If you do not have a Parole Officer, ask your doctor or health care provider for help.

How to Make Your Treatment Work Best

Treatment is not always easy because of the side effects. That is why it is important to do the following:

- Take care of yourself.
- Take your medicine when you are supposed to.
- Tell your doctor about any side effects as soon as they happen.
- Keep all your appointments with your doctor. If you have to cancel, call your doctor as soon as possible to make a new appointment.
- Write down your doctor’s name and phone number and keep this information with you at all times.
- Write down the names and amounts of medicines you are taking and keep this information with you at all times.

How to Protect Yourself

Avoid alcohol: Alcohol harms your liver and will probably make your hepatitis C worse. The less alcohol you drink, the better. The best choice is not to drink any alcohol at all.

Keep yourself healthy:

- Eat a healthy and balanced diet.
- Get plenty of sleep and rest.
- Try to exercise.
- Ask your Parole Officer or doctor if there is a support group in your area.

Talk to your doctor about drugs and other medicine: Your doctor needs to know everything you take to help keep you healthy. Talk to your doctor before you take any prescription drugs, street drugs, herbal remedies or over-the-counter drugs.

Do not inject drugs: If you use drugs and you are not able to stop, it is important to get treatment. If you are injecting drugs, never reuse or share needles, syringes, or works (spoons, cotton, cookers, water). Reusing or sharing may result in you getting another disease or spreading your hepatitis to others. Your Parole Officer may assist you with getting into a drug treatment program.

Ask questions about tattoos: If you get a tattoo, make sure new equipment and inks are used.

Get hepatitis A and hepatitis B vaccines: Hepatitis A and hepatitis B are liver diseases like hepatitis C. These can be very serious in someone with hepatitis C. If you have not already had these vaccines (shots), ask your doctor about them.

Always use condoms: Use a condom to reduce your risk of getting other STDs, such as HIV.

How to Protect Others

- Do not donate blood, body organs, tissue or semen.
- Do not share things that may have blood on them, such as toothbrushes, razors, and nail clippers.
- If you share drugs, do not share straws.
- If you have any cuts or sores, cover them with a bandage.
- Clean up any blood spills right away with bleach.

Hepatitis C is not spread by:

- Sneezing or coughing
- Hugging or kissing
- Breastfeeding
- Food or water
- Sharing eating utensils or drinking glasses
- Casual contact
What is the Hepatitis C Continuity Program?

The Hepatitis C Continuity Program is a program for New York State (NYS) Department of Correctional Services (DOCS) inmates who are under treatment for hepatitis C (HCV). The program promotes treatment completion upon and after release to the community.

This Program makes it possible for treatment to be initiated in DOCS regardless of the incarceration time remaining, since arrangements for continuity of treatment after release are possible. It enables inmates who initiate treatment prior to release to receive timely referral to appropriate community-based health care providers for continuation of treatment.

How does the Program work?

Participation on the part of inmates is voluntary and there is no cost to the inmate while incarcerated or after release. DOCS Health Services staff and facility Parole Officers work with inmates prior to initiation of treatment to:

- Arrange participation;
- Secure appropriate Release of Information forms;
- Arrange for Medicaid eligibility; and,
- Select a health care provider for referral for treatment completion in the community.

How do health care providers participate?

As release approaches, an initial medical appointment is made with the participating health care provider. Providers accept referrals for administration of medication. This involves a single staff person who receives the patient’s signed Release of Information forms and full medical record from the DOCS facility.

How are medications obtained?

DOCS staff arrange for shipment to the receiving health care provider of a two-week supply of Pegylated Interferon and Ribavirin, or similar medications, for use with the releasee while Medicaid, other coverage or participation in patient assistance programs is being arranged.

How many patients should the health care provider expect for treatment?

Only a small volume of patients are referred to each health care provider. To increase the probability of success, patients receive a thorough program orientation before release. As appropriate, Parole Officers are an additional resource to help secure arrangements to increase the probability of appointments being kept. For example, Parole Officers may provide access to supportive services (e.g., mental health, housing, substance use treatment), given the severe side effects that many patients experience while being treated for HCV. Taking these steps will increase the probability of successful treatment outcomes.

Taken from the New York State Department of Health website revised October 2007, NYS Hepatitis Continuity Program Fact Sheet, http://www.health.ny.gov/diseases/aids/corrections/hcv_factsheet.htm
Utah Jail and Prison Testing Program Inmate Referral Brochure

One Call. Lots of Help.

Peer Counseling
877-HELP-A-HEP
Call Today

Our goal is to help you understand and cope with hepatitis C in whatever way it is affecting you. With one call you can:

• Get information at the pace that you need
• Find resources in your community
• Connect with a peer counselor on your journey to better health

The 877-HELP-A-HEP national helpline is run by The Support Partnership, a group of non-profits working together to help people affected by hepatitis C.

All calls are confidential.

Dial toll-free: 877-HELP-A-HEP
Hours: 9:00am through 7:00pm EST (excluding holidays)
Website: www.hepahep.org
Email: info@hepahep.org

Updates and questions about this guide please forward to:
Heather Bush
Viral Hepatitis Prevention Coordinator
801-538-6194
hbush@utah.gov

Utah Hepatitis C Resource Guide 2013

> Immunizations
> Treatment providers
> Clinical Trials
> Testing Locations
> Web links

Last updated: 2.2013

Utah Hepatitis C Resource Guide 2013

UTAH DEPARTMENT OF HEALTH

sites.google.com/site/hepatitisinfoutah
Salt Lake Valley Health Department
(385) 468-4242
STD Clinic, Rm 136
610 South 200 East Salt Lake City, UT 84111
HCV antibody testing offered for $25
Monday-Friday: 12:00 p.m.-5:00 p.m.
Walk-ins welcome, Appointments strongly recommended

Fourth Street Clinic - Wasatch Homeless Health Care, Inc.
(801) 364-0056
404 South 400 West
Salt Lake City, UT 84101
www.fourthstclinic.org
Wasatch Homeless Health Care, Inc. is an open door clinic that serves homeless individuals and adolescents and services are provided at no cost to the patients.

Centro Hispano
817 S. Freedom Blvd
Provo, UT 84601
Phone: (801) 695-0258
Fax: (801) 691-5299
E-Mail: info@centrohispanouc.org
http://www.centrohispanouc.org/CentroHispano.aspx
Free HIV and Hep C Testing every Thursday from 3pm to 6pm.

Other Local Health Departments May Offer Testing
Please Call for Availability

Local Health Department Contacts on Pages 15-16 of this guide.

Internet Resources
Centers for Disease Control and Prevention, Hepatitis Branch
http://www.cdc.gov/hepatitis/C/index.htm
Know More Hepatitis
www.cdc.gov/KnowMoreHepatitis

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Hepatitis C Information

What is hepatitis C?
Hepatitis C is a disease caused by the hepatitis C virus (HCV). It primarily affects the liver and over time can damage the liver and health of an individual. Usually it takes a long time to do any damage, especially if the person who has it doesn't drink alcohol and maintains a healthy lifestyle. Sometimes the damage is so minimal that people will go through their entire lives without knowing they have HCV.

How does a person get hepatitis C?
HCV may be spread during activities that involve blood. In order to get HCV, a person's blood needs to be in contact with HCV-infected blood. Activities that involve blood include:
- Sharing personal items that can have blood on them like toothbrushes, razors, nail clippers, or glucose monitors
- Having uncovered cuts or sores
- Sharing personal equipment like needles or cocaine straws
- There is low risk of acquiring HCV sexually or for a mother transmitting it to her fetus during pregnancy or delivery
- There are other ways to get HCV and it is important to get more information about this from a health professional

HCV is not spread by kissing, hugging, sneezing, coughing, sharing food, eating utensils or glasses.

How is hepatitis C diagnosed?
Both are diagnosed with a blood test. The first test most people have is an HCV antibody test. When you test positive for anti-HCV, it means that you have been infected with the hepatitis C virus (HCV). What the test doesn't tell you is whether you currently have HCV. About 75% of people with anti-HCV still have the virus in their body six months after infection. This means that 25% of people (about 1 in 4) have antibodies, but not the virus. In these people, their immune system was able to "clear," or get rid of, HCV. If you test positive for anti-HCV, you need to get a confirmatory viral load test to see if you still have HCV. The test measures HCV RNA, or genetic material in the blood. If you have "cleared" or "resolved" the virus, this test will come back "undetectable." If the test comes back "detectable," then you are living with chronic (long-term) hepatitis C.

Utah Alcoholism Foundation
(801) 487-3276
857 East 200 South
Salt Lake City, UT 84102
www.uaf.org

VA Salt Lake City Health Care System
(801) 582-1565

**Mental Health Programs/ Providers Experienced with Hepatitis C**

Allison Musso, PhD
(801) 478-2790
1545 East 3300 South
Salt Lake City, UT 84106

Sundance Behavioral Resources LLC
(801) 264-9522
845 East 4800 South
Murray, UT 84107

Valley Mental Health
Adult A and D Unit (801) 263-7225
5965 South 900 East, Suite 150
Salt Lake City, UT 84121
* Crisis Unit (in case of emergency) (801) 261-1442

**HCV Testing Providers**

Utah AIDS Foundation
(801) 487-2323
1408 South 1100 East
Salt Lake City, UT 84106
www.uahaids.org

HCV antibody testing offered for $25
Mondays and Thursdays: 5:00 p.m.-7:00 p.m.
Is hepatitis C rare?
No. Approximately 3 to 4 million people in the United States have HCV. Worldwide, more than 170 million people have HCV.

Is it serious?
Maybe. It should be regarded as a potentially serious problem. The good news is that for most people, HCV will not create major health problems. Your medical provider will be able to determine the seriousness of your particular situation.

Will I die from hepatitis C?
Most people who die with HCV and not of HCV. Out of 100 people who have hepatitis C, 3 or fewer will die an HCV-related death.

What are the symptoms of hepatitis C?
Some people have little or no symptoms. This could be because they hardly have any liver damage. Unfortunately, it also could be because the liver is a “non-complaining” organ. This means that there could be a lot of liver damage and hardly any symptoms. The most common symptom of HCV is fatigue. Body aches, flu-like symptoms, depression, and abdominal discomfort are also symptoms of HCV.

Is there treatment for hepatitis C?
Yes, the medications to treat hepatitis C infection can cure it in about 50% of people who take them. These drugs do have side effects. Talk to your medical provider about whether treatment is right for you.

What should I do if I don’t know whether I still have hepatitis C?
If you know you have antibodies to HCV you should get a confirmatory test, but if you have been unable to get the additional confirmation test, you are not alone. The viral load tests are expensive and hard to get without insurance. Since most people who have anti-HCV do have HCV, the best thing to do while you wait for the test is to live like you have hepatitis C, taking good care of yourself and protecting the health of your liver. To help your liver:

- It is important to reduce your alcohol intake as much as you can
- Eat a healthy, low-fat, low salt diet
- Drink a lot of water
- Get enough rest and moderate exercise

Substance Abuse Treatment Programs/ Providers Experienced with

The Ark of Little Cottonwood
Jeremy Boberg
(801) 733-9913
2919 Granite Hollow
Sandy, UT 84092
www.thearkoflittlecottonwood.com
*Private Insurance is required.

First Step House (men only)
Shawn McMillen
(801) 359-8862
411 North Grant Street
Salt Lake City, UT 84116

Project Reality
Erin Norris
(801) 364-8080
150 East 700 South
Salt Lake City, UT 84111

The Haven
Mike Ray
(801) 533-0070
974 East South Temple
Salt Lake City, UT 84102

Cornerstone Counseling Center
John Bonner
(801) 363-8414
436 West Bearcat Drive
Salt Lake City, UT 84115
www.cornerstoneslc.com
Testing positive for antibodies to the hepatitis C virus (anti-HCV) may be scary, but now you have information that can improve your health and well-being. Don’t panic— the knowledge you now have will help you make healthier decisions for you and your liver. Information is the key to living well with hepatitis C.

Step One: Locate a Provider

After you have tested positive for HCV antibodies (anti-HCV) the first thing you need to do is find an appropriate provider that can give you a confirmatory test. This test is what confirms whether you do or do not still have HCV.

Appropriate Providers may include the following:

- **Primary Care Physicians**– Most offer HCV testing and treatment. If you do not currently have a primary care physician you can find information about providers in your area in this book (see pages 22-26).
- **Community Health Centers**– If you do not currently have a primary care provider you can find information about health centers in your area in this book (pages 16-18).

Other Appropriate Sources of Information about Providers (found on page 17):

- **Health Access Team-Ogden**
- **Fourth Street Clinic-Wasaatch Homeless Health Care, Inc.**
- **HealthPro**– An interactive Hep C map to help you locate medical treatments
- **Healthwell Foundation**– a resource for those with insurance who cannot afford their co-pays, co-insurance, and premiums for important medical treatments.

You can also find out if you are eligible for:

- **Primary Care Network**– Providing healthcare coverage for single adults ages 19-64 who qualify including primary care services and other medical services. More information is provided in this booklet (page 8). If eligible there this booklet has information about providers that accept individuals who are get coverage through Primary Care Network (PCN) (page 12).

**MONTANA**

Billings Clinic
Karen Stainton NP
406-238-2500 or 1-800-332-7156
801 North 29th Street
Billings, MT 59107-7000

Northwest Specialists- Kalispell
Jeffrey A. Tjaden, M.D., M.P.H.
(406) 751-5364
1297 Burns Way, Suite 4
Kalispell, MT 59901

**WYOMING**

Wilson Medical Clinic
Mike Manolascino MD
307-733-5676
5235 HHR Ranch Rd
Wilson, WY 82014

Cheyenne Health and Wellness
Dr. Hagemeyer
(307) 635-3618
2508 E Fox Farm Rd Ste 1-1A
Cheyenne, Wyoming 82007-2559

Northwest Wyoming Family Planning
Sonja Hein MD
Yancy Bonner
(307) 527-5174
1231 Rumsey Avenue
Cody, WY 82414

Northwest Wyoming Family Planning
(307) 754-5023
246 N. Hamilton
Powell, WY 82435

University of Wyoming Family Practice
Nima Azarbehi MD (3rd Year Medical Student)
(307) 632-2434
821 East 18th Street
Cheyenne, WY 82001
Providers in Neighboring States

**COLORADO**

Merrillac Community Health Center
Tonya Wren MD
John Cain PA
Schedule eligibility appointments by calling (970) 298-1782
2333 North 6th Street
Grand Junction, CO 81501

Mountain Family Health Clinic
Ken Davis PA
970-945-2840
195 W 14th St,
Rifle, CO. 81650

Mountain Family Health Clinic
Amy Brown MD
970-945-2840
1905 Blake Ave
Glenwood Springs, CO. 81601

Grand Junction Gastroenterology
Serena Evans NP
(970) 242-6600
1035 Wellington Avenue
Grand Junction, CO 81501

**CALIFORNIA**

Fairchild Medical Clinic
Judy Broeckel MD
530.842.3507
475 Bruce Street
Yreka, CA 96097

Sutter Pacific Health
Maurice Thomas NP
707-521-7795
3883 Airway Drive
Santa Rosa, CA 95403

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**Medicaid** - A program that provides health care for people who have low income and cannot afford health care. You must be a citizen or legal resident of the United States to apply. More information about Medicaid is listed in this booklet (page 13). In this booklet you can also find information about providers that accept Medicaid (page 14).

**Veterans Services** - Locations and contact information is provided in this booklet (page 21).

If those options do not work for you, contact:

- **Project ECHO** - A program that will link you to providers that provide HCV testing and treatment in Utah and Out of State. For more information please call 1-855-297-4528

- **Your Local Health Department** - If you do not have a provider or cannot locate an appropriate provider you can schedule an appointment at your local health department to get a confirmatory test. For local health department information see pages 19-20.

- **Providers in Neighboring States** - For information about providers in Colorado, Montana, and Wyoming see pages 27-29.

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**Step Two: Get a Confirmatory Test**

A positive HCV antibody test means that at some point you have had the Hepatitis C Virus (HCV). You need to get a confirmatory viral load test to see if you still have HCV. This test measures HCV RNA, or genetic material in the blood. If you have “cleared” or “resolved” the virus, this test will come back “undetectable.” If the test comes back “detectable,” then you are living with chronic (long-term) hepatitis C.

If You Have a POSITIVE RNA (confirmatory) TEST:

There are probably many things running through your mind. Hepatitis C is a slow-moving disease, so most likely you will have a lot of time to make decisions about your health. Take the time to learn about hepatitis C and make the right decisions for yourself. In fact, you shouldn’t make any important decisions right away – you may still be in shock. There may be some days when you feel balanced and ready to take steps towards a healthier life, and other days when you don’t want to deal with your hepatitis C – this is normal. Take the time to think about what is important for you now, and remember you will have time to make all the decisions you need to make.
Step Three: Find Support

One of the most important things you can do is to find support. It can be frightening to be diagnosed with hepatitis C but remember that you are not alone. Talk with people you care about and ask for support. Different services are available to you.

**Mental Health Services**– Programs that can include counseling and peer support groups. For a list of professionals that are experienced with hepatitis C [see page 30].

  - **Hepatitis C Support Group**
    - Location: St. Paul’s Episcopal Church
    - 261 South 900 East, SLC Upstairs Media Room
    - Days: 2nd & 4th Wednesday of each month
    - Time: 6:30 p.m.
    - Contact: Shauna, 801-699-9779

**Financial Services**– Programs that include some financial assistance to eligible applicants seeking HCV treatment. Different programs have different eligibility requirements and provide different financial services.

  - **Patient Access Network Foundation**– A resource for individuals that have insurance and need co-pay assistance [page 17].
  - **Health Access Team-Ogden** (more information on page 11)
  - **Fourth Street Clinic-Wasatch Homeless Health Care, Inc**. more information on page 11.
  - **Primary Care Network**– Providing healthcare coverage for single adults ages 19-64 who qualify including primary care services and other medical services [see page 12]. If eligible [see pages 12-13] for providers that accept individuals who are get coverage through Primary Care Network (PCN)
  - **Medicaid**– A program that provides health care for people who have low income and cannot afford health care. You must be a citizen or legal resident of the United States to apply. For more information [see page 13]. In this booklet you can also find information about providers that accept Medicaid [page 14].
  - **Veterans Services**– Locations and contact information is provided in this booklet [page 21].
  - **Patient Assistance Programs**– Programs that provide some financial assistance to for medication, depending on eligibility. For a list of these programs [see page 15].
  - **Clinical Trials**– Some individuals seeking treatment may be eligible.

**PROVO/OREM AREA**

- **Central Utah Clinic**
  - 1055 North 900 West, Provo, UT 84604
  - (801) 374-1268
  - Accepts Uninsured or Low-income Patients
  - Hepatitis C Testing Available, Treatment

- **Utah State Hospital**
  - 1300 East Center Street (801) 344-4631
  - Provo, UT 84603
  - Accepts Uninsured or Low-income Patients
  - Hepatitis C Testing Available, Treatment
  - Hepatitis A & B vaccinations
  - Alternative Health Care: Psychiatry

**CENTRAL/SOUTHERN UTAH**

- **Gunnison Family Practice**
  - Adam Jensen DO
  - (435) 528-7230
  - 95 East Center
  - Gunnison, UT 84643

- **Southwest Community Health Center- St. George**
  - David Grygla MD
  - (435) 986-2565
  - 168 N 100 E Suite 101, St. George, UT 84770

- **Mountain West Gastroenterology**
  - (435) 673-1149
  - 369 East Riverside Drive, Suite A
  - St. George, UT 84790
  - www.mwgi.com
  - Accepts Uninsured or Low-income Patients
  - Accepts Medicaid
  - Hepatitis C Testing Available, Treatment
Hepatitis C Treatment
McKay Dee Family Medicine Residency/Porter Clinic
Ann Hutchinson MD
(801) 387-5300
Suite A-700
Ogden, UT 84404
Scott Larsen MD
(801) 387-5300
4401 Harrison Blvd
Suit A-700
Ogden, UT 84404
Utah Digestive Health Institute
John Lowe, MD (801) 475-6400
Nate McBride, PA-C (801) 475-6400
6028 South Ridgeline Drive
South Ogden, UT 84405
Accepts Uninsured or Low-income Patients
Accepts Medicaid
Accepts Primary Care Network
Hepatitis C Testing Available
Hepatitis C Treatment
Other Language(s) Spoken: Spanish
Midtown Community Health Clinic - Ogden
Dr Richard Gregorie
(801)393-5355
2240 Adams Avenue
Ogden, UT 84401
www.midtownchc.org

LOGAN AREA
Northern Utah Gastroenterology
Dirk R. Davis, MD
Bryan Larsen, MD
(435) 787-0276
630 East 1400 North
Logan, UT 84341
Accepts Uninsured or Low-income Patients
Accepts Medicaid
Hepatitis C testing available Hepatitis C Treatment
Other Language Spoken: Spanish

Step Four: Prevention

Obtaining treatment for HCV is very important but there are other things you can do to reduce your risk of further infection and prevent any further damage to your liver. It is also important to keep the virus from spreading to others.

To Help Your Liver:
- Reduce your alcohol intake as much as possible (alcohol harms the liver)
- Eat a healthy, low-fat, low salt diet
- Drink a lot of water
- Get enough rest and moderate exercise

Other things are Important too!
- Get Immunized/Vaccinated and tested for HAV (the virus that causes hepatitis A) and HBV (the virus that causes Hepatitis B). More information can be found on page 7.
- See your Primary Care Physician for regular check-ups and visits to stay healthy and monitor your liver
- Be safe to not get HIV. Hep-C often gets worse much faster in people who have a co-infection of hep-C/HIV. HIV can be spread by direct contact with infected blood, semen, vaginal secretions, and breast milk.

Preventing transmission to others
HCV is transmitted through direct blood contact – someone else has to get your blood directly into their blood through sharing a needle, a razor, nail clippers, a toothbrush, or anything that may have your blood on it. HCV has been found to survive outside the body for up to four days. Even when blood is present, there also has to be an opening for the blood to get into the other person’s body. It is uncommon but possible for HCV to be transmitted by sex or from a mother to her baby during pregnancy or birth. You cannot transmit HCV through hugging, kissing, sharing eating or drinking utensils, or sharing a bathroom.

Substance Abuse Services - This can include treatment, counseling, and other services. For a list of providers that are experienced with Hepatitis C see pages 29-30.
Immunization Information

If you have hepatitis C, it is highly recommended that you get vaccines against hepatitis A (HAV) and B (HBV).

When people with hepatitis C are co-infected with hepatitis A and B, the outcome of the infection can be very severe.

A combination HAV/HBV vaccine is also available for people who are interested, and may be available through a special federal initiative grant for little or no cost to persons with risk conditions who are uninsured.

Contact [http://www.immunize-utah.org/] to inquire about hepatitis A and B vaccination availability.
My Hepatitis Vaccination Records

HCV Testing

HCV Antibody Positive: ___ Y ___ N
HCV PCR Positive: ___ Y ___ N
Test Date _______/
Follow-Up
HCV PCR Positive: ___ Y ___ N
Test Date _______/
HCV Viral Load
___ Copies/ML - Test Date _______/
___ Copies/ML - Test Date _______/
HCV Genotype
Test Date _______/
Liver Biopsy
Stage ______ Grade ______
Test Date ______/_____

Hepatitis A and B Testing

Hepatitis A Total Antibody
Positive: ___ Y ___ N
Test Date ______/_____
Hepatitis B Surface Antibody
Positive: ___ Y ___ N
Test Date ______/_____
Hepatitis B Surface Antigen
Positive: ___ Y ___ N
Test Date ______/_____
Hepatitis B Core Antibody
Positive: ___ Y ___ N
Test Date ______/_____
My Medical Provider’s Information

MEDICAL PROVIDER: __________________________________________
PHONE NUMBER: (_____) _______________________

What did I have checked?

What laboratory or diagnostic test (blood/urine test, vaccination, procedures, etc.) did I have done?

MEDICAL PROVIDER: __________________________________________
PHONE NUMBER: (_____) _______________________

What did I have checked?

What laboratory or diagnostic test (blood/urine test, vaccination, procedures, etc.) did I have done?

MEDICAL PROVIDER: __________________________________________
PHONE NUMBER: (_____) _______________________

What did I have checked?

What laboratory or diagnostic test (blood/urine test, vaccination, procedures, etc.) did I have done?
Veterans Affairs

V.A. Salt Lake Health Care System
(801) 582-1565 Toll Free: 1-800-813-4012
500 Foothill Drive
Salt Lake City, UT 84148

Western Salt Lake CBOC
(801) 47-9734
2750 South 5600 West
West Valley City, Utah 84120

Fountain Green Outpatient Clinic
(435) 445-3301
275 West 300 South
Fountain Green, UT 84632

Nephi CBOC
(435) 623-3129
48 East 1500 North
Nephi, Utah 84648

Ogden CBOC
(801) 479-4105
982 Chambers Street
South Ogden, Utah 84403

Provo Vet Center
(801) 377-1117
1807 North 1120 West
Provo, Utah 84604

Roosevelt CBOC
(435) 725-1055
246 West 200 North
Roosevelt, Utah 84066-2336

St. George CBOC
(435) 634-7606 X6600
1067 East Tabernacle, Ste 7
St. George, Utah 84770

Orem CBOC
(801) 235-9953
1443 West 800 North, Ste 302
Orem, Utah 84057-3658

My Medical History

My Name: __________________________________________________
Date of birth: _______________________________________________
Racial/ethnic background: _____________________________________
Allergies to medications, foods, other substances: _________________
__________________________________________________________
All dietary supplements and drugs I am taking or have taken
recently (prescription, over-the-counter, etc.): ___________________
__________________________________________________________
Pregnant or Breast Feeding: (Y/N) _____________________________
Any Major Illnesses I have been diagnosed with (especially ones
that are still active or were diagnosed recently): __________________
__________________________________________________________
Childhood Illnesses, Immunizations, Surgeries I have had and
when: ______________________________________________________
place): ______________________________________________________
Family Illnesses and Cause of Death of Close Relatives: __________
Places traveled to recently: _________________________________
Any recent life changes (divorce, job change, death of family or
friend): ____________________________________________________
GENERAL RESOURCES

Hepatitis C Support Group
Location: St. Paul’s Episcopal Church
261 South 900 East, SLC Upstairs Media Room
Days: 2nd & 4th Wednesday of each month
Time: 6:30 p.m.
Contact: Shauna, 801-699-9779

Project ECHO
Can help identify and existing provider in your area or provide assistance to current provider on treating Hepatitis C
1-855-297-4528

Health Access Team - Ogden
2240 Adams Ave (801) 393-5355
Ogden, UT 84404 Fax: (801) 394-4609
www.healthaccessteam.org/intro.php
The Health Access Team works with the underserved community of Ogden to improve their health status through education and equitable access to health care resources.

Patient Access Network Foundation
Resource for individuals that have insurance and need copay assistance.
Website: www.panfoundation.org/index.php
Phone: 1-866-316-7263

Fourth Street Clinic - Wasatch Homeless Health Care, Inc.
(801) 364-0058
404 South 400 West
Salt Lake City, UT 84101
www.fourthstreetclinic.org
Wasatch Homeless Health Care, Inc. is an open door clinic that serves homeless individuals and adolescents and services are provided at no cost to the patients.

HealthPro
Interactive Hepatitis C Referral Resource Map to locate medical clinic.
http://www.healthpro-solutions.org/maps/index.htm

Healthwell Foundation
A resource for individuals with insurance who cannot afford their copays, coinsurance, and premiums for important medical treatments.
Local Health Departments
1-888-EPI-UTAH (1-888-374-8824)

Bear River Health Department
655 East 1300 North
Logan, Utah 84341
Box Elder, Cache, Rich Counties
(435) 792-6500 (435) 716-8771 or 1-877-229-8825

Central Utah Public Health Department
70 Westview Drive
Richfield, Utah 84701
Juab, Milford, Pugl, Sanpete, Sevier, Wayne Counties
(435) 896-5451

Davis County Health Department
22 South State Street
Clearfield, Utah
801-525-5220 After hours: 801-807-9418

Salt Lake Valley Health Department
610 South 200 East Salt Lake City, UT 84111
(385) 468-4242

Southeastern Utah District Health Department
28 South First East, P.O. Box 800
Price, Utah 84501
Carbon, Emery, Grand, San Juan Counties
(435) 637-3671 (435) 650-3550

Southwest Utah Public Health Department
168 North 100 East
St George, Utah 84770
Beaver, Garfield, Iron, Kane, Washington counties
(435) 673-3528 (435) 674-5404

Summit County Public Health Department
85 North 50 East, P.O. Box 128
Coalville, Utah 84017
(435) 336-2222

Primary Care Network
Primary Care Network
Toll Free: 1-888-222-2542
PO Box 144102
Salt Lake City, Utah 84114-4102
pcn@utah.gov

The Primary Care Network (PCN) is health care coverage for single adults ages 19–64 who qualify. Primary care services available through PCN include primary care provider visits, emergency room visits, emergency medical transportation, lab services, x-rays, up to four prescriptions per month, dental exams, dental x-rays, cleanings, and fillings, one eye exam per year, and family planning methods. Those who qualify will gain access to preventive health insurance coverage. If you are uninsured and have children at home under age 18, you may qualify for health insurance.

Apply online. Go to: http://utahhelps.utah.gov
To print an application, go to: http://health.utah.gov/pcn/apply.html
Visit an eligibility office. To find an office near you, please call 1-888-222-2542.

Note: Once someone has PCN they will not qualify for The Health Access Project. The Health Access Project should be contacted first. The Health Access Project will register PCN for primary care and specialty care.

Providers Offering HCV Services that Accept PCN

John Lowe, MD
Utah Digestive Health Institute (801) 479-9400
6028 South Ridgeline Drive
South Ogden, UT 84405

Nate McBride, PA-C
Utah Digestive Health Institute (801) 475-5400
6028 South Ridgeline Drive, Suite 201
South Ogden, UT 84405
Medicaid

Medicaid is a program for people who have low income and cannot afford health care. You must be a citizen or a legal resident of the United States and your qualification is determined depending on your disability, income and resources. To find out your eligibility, call (801) 538-6155 or 1-800-662-9651. Visit a Medicaid Office near you: http://jobs.utah.gov/Regions/ec.html

Apply online: https://utahclicks.org
Read the instruction and click on "Get Started!" on the bottom of the page. Mail or fax your application form to the Medicaid Office.

To print an application form:

2013 Utah Hepatitis C Resource Guide
Providers Offering HCV Services That Accept Medicaid

J. David Bane, MD (801) 965-3501
Granger Medical Clinic
3725 West 4100 South
West Valley City, UT 84120

Lynn Q. Beard, MD
Medical Arts Center
(435) 723-5248
564 South 900 West
Brigham City, UT 84302

Kenneth Buchi, MD and Eric E. Heaton, PAC
(801) 233-8233
3584 West 900 South, Suite 300
West Jordan, UT 84088

Central Utah Clinic
(801) 374-1268
1055 North 500 West, Provo, UT 84604

Northern Utah Gastroenterology
Bryan Larsen, MD (435) 787-0270
Dirk R. Davis, MD (435) 787-0276
630 East 1400 North, Suite 100 A
Logan, UT 84341

Utah Digestive Health Institute
(801) 475-5400
6028 South Ridgeline Drive
South Ogden, UT 84405
Patient Assistance Programs (Medication Assistance)

Genentech Patient Assistance Program
1-877-75ROCHE (877-757-6243)
The Genentech Patient Assistance Foundation provides free Genentech products to patients who cannot afford prescription drugs and qualify for the program. It does not charge a co-payment or limit the time while the patient is receiving free drugs.

Merck Cares
1-866-939-4372
www.merck-cares.com

Vertex Patient Assistance Program
www.vertexgps.com or 1-855-837-8394
Vertex GPS: Guidance & Patient Support program provides services for eligible patients, including information about financial assistance programs, educational support, and a free 24/7 nurse support line.

Clinical Trials

Clinical Research Centers of America
801-690-7299
Email: info@liver-crca.com
Website: www.liver-crca.com
5450 S Green Street, Suite B, Murray, UT 84123.

University of Utah Medical Center
http://healthcare.utah.edu/clinicaltrials/

Jean Brown Research
801-261-2000 Sue Griffths
1205 East 3900 South #301, Salt Lake City, UT 84124
www.jeanbrownresearch.com

Lifetree Clinical Research
(801) 269-8200
3838 S 700 E #202, Salt Lake City, UT 84106
www.crilifetree.com

Community Health Centers

Community-Based Health Centers (CHCs) provide access to case-managed, family-oriented preventive and primary health care services for people living in medically underserved community. CHCs provide high quality care through a proven cost-effective model and all the services are provided based on an ability to pay.

Community Health Centers, Inc.
(801) 412-6820
http://www.chc-ut.org/

Central City Community Health Center
(801) 538-8834
461 South 400 East, Salt Lake City, UT 84111

Stephen D Ratcliff Community Health Center
(801) 328-5750
1305 West 1000 North, SLC, UT 84116

Copperview Community Health Center
(801) 566-5484
8446 Harrison Street, Midvale, UT 84047

Oquirrh View Community Health Center
(801) 964-6214
4745 South 3200 West, SLC, UT 84118

Bear Lake Community Health Center, Inc.
LaVal Jensen, Executive Director
(435) 946-3660
325 West Logan Highway, Suite 3
(435) 946-8215
Garden City, UT 84025

Canyonlands Community Health Care
Sarah Allen, Chief Executive Officer
(928) 645-9475
827 Vista Avenue, Page, AZ 86040

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827 Vista Avenue, Page, AZ 86040

Document received from Erin Hellstrom CHES, Utah State Jail and Prison Program Intergrated Testing Coordinator April 1, 2013.
**Figure 2. CDC Guidelines for Signal to Cut-off Ratio Testing for HCV Screening.**

<table>
<thead>
<tr>
<th>Screening Test Kit Name</th>
<th>Manufacturer</th>
<th>Assay Format</th>
<th>Signal-to-cut-off ratio predictive of a true positive ≥ 95% of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho HCV Version 3.0 ELISA Test System</td>
<td>Ortho</td>
<td>EIA (Enzyme Immunoassay)</td>
<td>≥ 3.8</td>
</tr>
<tr>
<td>Abbott HCV EIA 2.0</td>
<td>Abbott</td>
<td>EIA (Enzyme Immunoassay)</td>
<td>≥ 3.8</td>
</tr>
<tr>
<td>VITROS Anti-HCV</td>
<td>Ortho</td>
<td>CIA (Chemiluminescent Immunoassay)</td>
<td>≥ 8.0</td>
</tr>
<tr>
<td>AxSYM Anti-HCV</td>
<td>Abbott</td>
<td>MEIA (Microparticle Immunoassay)</td>
<td>≥ 10.0</td>
</tr>
<tr>
<td>Architect Anti-HCV</td>
<td>Abbott</td>
<td>CMIA (Chemiluminescent Microparticle Immunoassay)</td>
<td>≥ 5.0</td>
</tr>
<tr>
<td>Advia Centaur HCV</td>
<td>Bayer</td>
<td>CIA (Chemiluminescent Immunoassay)</td>
<td>≥ 11.0</td>
</tr>
</tbody>
</table>

**Hepatitis C Virus (HCV) Infection Testing for Diagnosis**

- **Anti-HCV**
  - **NEGATIVE**
  - **STOP**
- **POSITIVE**
  - **Confirmed**
    - High s/co ratio or RIBA-positive or HCV RNA positive
  - **Unconfirmed**
    - and no other test done
  - **Unconfirmed**
    - and HCV RNA negative

- **NAT for HCV RNA**
  - **pos**
  - **RIBA for anti-HCV**
    - **pos**
  - **STOP**
    - Medical evaluation for active infection and liver disease
  - **Indeterminate**
    - Repeat anti-HCV in ≥ 1 month
  - **NAT for HCV RNA**
    - **pos**
    - **STOP**
    - Anti-HCV: Antibody to HCV
    - NAT: Nucleic acid testing
    - RIBA: Recombinant immunoblot assay
    - RNA: Ribonucleic acid

Figure 3. Veteran’s Administration counseling recommendations for HCV screening.

Stages of Counseling

4.1 Stage 1: Pretest Counseling

A. Introduction to testing:

- Discuss the VA's commitment to testing and screening for hepatitis C in response to the significant prevalence of hepatitis C among veterans.
- Reinforce with patient that anti-HCV testing is voluntary. Refusal by the patient to have an anti-HCV test performed will not impede the patient's access to health care.

B. Establish and identify your patient's risk for hepatitis C:

- Identify and discuss behaviors and history that may pose risk for hepatitis C.
- Document risk factors for hepatitis C.

C. Utilize the VA Screening Guidelines for antibody testing for hepatitis C:

- **Patient desires to be tested**, or
- One or more of the following risks are identified:
  - Prior or current intravenous drug use
  - Blood transfusion or organ transplantation prior to 1992
  - Hemodialysis
  - Vietnam-era Veteran, defined by dates of service from 1964 through 1975
  - Health care, emergency medical care, emergency medical and public safety workers after a needlestick injury or mucosal exposure to HCV-positive blood
  - Tattoos or body-piercings obtained in non-regulated settings
  - Intranasal drug users who have shared paraphernalia
  - Past sexual exposure to an HCV infected partner or 10 or more lifetime sexual partners
  - Current sexual partners of HCV-infected persons
  - Persons with HIV infection
  - History of hemophilia and received clotting factor concentrates prior to 1987
  - History of unexplained liver disease or abnormal liver function test
Persons who have alcoholic hepatitis or a diagnosis (DSM-IV) of alcohol abuse or dependence.

Born to a mother with HCV

D. Discuss referrals for voluntary screening and testing for other diseases that may share some risk factors with hepatitis C such as HIV and hepatitis B, particularly if the risk history reveals that the patient is engaging in the following:

- Unprotected sex with multiple partners, or a partner known to be infected with HIV or hepatitis B
- I.V. drug use, especially sharing works with others
- Exchange of sex for money and/or drugs

E. Work with patient to develop a risk-reduction plan:

- Discuss ways to prevent transmission of the hepatitis C virus to self or others based on risk factors identified during the risk assessment.
- Based on risk factors identified, encourage the patient to undergo testing and screening for other conditions such as hepatitis B, HIV and STDs and provide possible referrals for testing and screening.
- Address strategies to reduce risk based on the Centers for Disease Control and Prevention guidelines.

F. Assess patient's readiness and resources for prevention of hepatitis C virus infection and transmission:

- Inquire into patient's ability and willingness to minimize infection and perceived self-efficacy in prevention of infection.
- Discuss any cultural issues and/or barriers that prevent the patient from reducing risk of hepatitis C virus infection, including previous attempts at preventive behaviors that were unsuccessful.
- Based on the individual risk for hepatitis C virus infection, assist the patient in identifying and generating risk-reduction strategies that the patient would be comfortable using, such as utilizing needle-exchange programs in the community instead of reusing needles.
- Provide information and referrals if necessary which may assist patient in reducing risk for hepatitis C such as chemical dependence counseling and/or support groups.

**Prevention messages for persons with high-risk drug or sexual practices (1)**

1. Persons who use or inject illegal drugs should be advised:
   - To stop using and injecting drugs.
   - To enter and complete substance abuse treatment, including relapse prevention programs.
   - If continuing to inject drugs;
- never reuse or "share" syringes, needles, water, or drug preparation equipment; if injection equipment has been used by other persons, first clean the equipment with bleach and water;
- use only sterile syringes obtained from a reliable source (e.g., pharmacies);
- use a new sterile syringe to prepare and inject drugs;
- use sterile water to prepare drugs; otherwise, use clean water from a reliable source (such as fresh tap water);
- use a new or disinfected container ("cooker") and a new filter ("cotton") to prepare drugs;
- clean the injection site before injection with a new alcohol swab; and
- dispose safely of syringes after one use.
- To get vaccinated against hepatitis B and hepatitis A.

2. Persons who are at risk for sexually transmitted diseases should be advised:
   - That the surest way to prevent the spread of HIV infection and other sexually transmitted diseases is to have sex with only one uninfected partner or not to have sex at all.
   - To use latex condoms correctly and every time to protect themselves and their partners from diseases spread through sexual activity.
   - To get vaccinated against hepatitis B, and if appropriate, hepatitis A.

**G. Assist patient with the decision to be tested for hepatitis C:**

**Use risk assessment and risk-reduction plan as a guide.**

- If patient does not decide to test, provide written information and document decision and pertinent risk factors discussed.
- If patient decides to test, proceed with steps below.

**H. Discuss testing methods and procedures:**

- Testing is voluntary.
- Refusal to have a hepatitis C antibody test performed will not impede the patient's access to health care.
- Explain to the patient that blood will be drawn and tested for the hepatitis C antibody.
- Explain conditions of confidentiality. Emphasize to patient that the result of the test will be stored in the patient's medical chart. Any illegal or unauthorized use of the hepatitis C antibody test result or any other aspect of the patient's medical history is strictly prohibited by the Department of Veterans Affairs.

**I. Briefly discuss the natural history of hepatitis C:**

- The majority of people with hepatitis C present with few or no symptoms, but many of these people can still transmit the hepatitis C virus.
Many people develop chronic hepatitis C infection and a subset of this population may develop significant liver disease.

The antibody can be detected in roughly 80% of patients within 15 weeks of exposure and >97% within six months of exposure.

Elevated liver enzymes (e.g., serum ALT levels) are usually the first indication of infection, but normal liver enzyme levels do not indicate resolution of hepatitis C virus infection.

### J. Discuss some ways in which hepatitis C is not spread:

According to the Centers for Disease Control and Prevention, the hepatitis C virus is not spread by:

- sneezing
- coughing
- hugging
- food or water
- sharing eating utensils or drinking glasses
- casual contact

### K. Discuss the advantages and disadvantages for the patient of knowing his/her serological status.

**Advantages:**

- Patients may find reassurance in knowing their test results.
- Education on transmission education for those who test positive can help prevent transmission to family members, sexual partners and others.
- The patient can develop strategies to keep his/her liver healthy. For example, through the avoidance of alcohol and certain drugs which are hepatotoxic, the patient can prevent additional damage to the liver.
- The patient may develop a better awareness of his/her risk for other types of viral hepatitis such as hepatitis A virus and hepatitis B virus and be vaccinated for those viruses, if appropriate.
- Early diagnosis and additional tests can help the practitioner refine the diagnosis as well as determine the severity of liver injury caused by hepatitis C.
- Although there is neither a predictable cure nor a vaccine for hepatitis C, there are treatments currently available.

**Disadvantages:**

- The patient may experience anxiety related to being tested for hepatitis C, regardless of the test outcome.
- There is neither a vaccine nor a predictable cure for hepatitis C. There are treatments for hepatitis C. However, these medications are still being tested and refined. Therefore, being tested and found positive will not ensure that treatment will work for the patient.
The patient needs to be informed that testing positive for hepatitis C could cause potential disrupted personal relationships
inability to obtain life and health insurance
difficulties in employment or educational opportunities
The majority of individuals who are diagnosed with hepatitis C are chronic carriers. The patient may experience psychological and physical distress related to being diagnosed with a chronic illness.

L. Prepare patient for possible test result outcomes and posttest counseling:

The patient will receive one of the following test results: negative, positive or indeterminate. Explain that possible re-testing may be needed depending on the result outcome and risk factors.
Refer to the Hepatitis C Antibody Screening Flow Chart for the Veteran Population.
Discuss the limitations of the ELISA test (2)
The newer version of the ELISA test has a greater sensitivity of ≥97%. This means that the test will detect antibodies in infected patients approximately 97% of the time. ELISA will fail to detect antibodies in patients with hepatitis C about 3% of the time.
The hepatitis C antibody can be detected in roughly 80% of patients within 15 weeks of exposure and >90% of patients within 5 months of exposure, and in greater or equal of 97% of patients by 6 months after exposure. Blood drawn during the period of initial infection and emergence of antibodies may yield false-negative test results.
False-negativity sometimes occurs in those with hepatitis C who are immunocompromised.
Presence of antibodies does not differentiate between acute, chronic or resolved infection.
Discuss the reliability of the antibody test, and the need for confirmation of test results.
Discuss the sensitivity and specificity of tests used to diagnose infection. The newer version of the ELISA test has a sensitivity of greater or equal than 97%. This means that the test will detect antibodies in infected patients approximately 97% of the time.
Address the possible need for supplemental testing such as RIBA or PCR. RIBA (recombinant immunoblot assay) is a highly specific test. It is useful in minimizing false-positive results in a low-risk population for infection (i.e. blood donors). PCR (polymerase chain reaction) identifies hepatitis C virus RNA.
Discuss the need for possible confirmation of positive test results or indeterminate results through supplemental testing such as RIBA or PCR.
RIBA is a highly specific test. It is useful in minimizing false-positive results in a low-risk population for infection (i.e. blood donors).
PCR identifies hepatitis C virus RNA and is highly sensitive, but has not been approved by the FDA (Food and Drug Administration).
RIBA and/or PCR for hepatitis C virus RNA may be required in a high-risk population for infection, i.e. injection drug users with normal liver function tests.
Schedule a return date to meet with physician, nurse, or counselor to discuss test results and schedule appropriate follow-up appointments. (Each VA medical facility should have a
knowledgeable health care professional to provide results and education in a confidential manner. This person should also be available for the patient during the waiting period for test results. This person ideally should be a trained counselor who is skilful at providing test results such as a physician, nurse, and/or HIV counselor.)

- Emphasize the need for the patient to return to clinic for the test result on the scheduled date.
- Encourage the patient to contact the VA center prior to the return appointment if he/she has any questions and/or concerns relating to the testing process.

**M. Provide written information on hepatitis C testing and prevention counseling:**

- Reinforce and supplement testing, prevention counseling and education.
- Provide current and accurate information geared toward the veteran patient being tested for the hepatitis C antibody and patient appropriate risk-reduction activities. (See the [Publications and Products](#))

**Stage 2: Posttest Counseling**

**A. Inform the patient of the test result. Assist the patient in understanding the meaning of the test result.**

**Negative Results:**

- A negative result means that the test did not detect antibodies in the blood, suggesting that the patient is unlikely to be infected with the hepatitis C virus unless the patient is immunocompromised.
- Explain to the patient that the antibody tests are not fail-safe and can yield incorrect results, especially in persons who are immunocompromised. In certain cases, additional testing may be necessary.
- Evaluate patient's emotional status upon receiving test result.
- Suggest the necessity of re-testing if exposure was recent (within 6 months) and the patient is in a high-risk category (i.e. recent history of injection drug use).
- Suggest the need for testing for hepatitis C virus RNA if the patient is immunocompromised.
- Allow time for the patient to ask questions regarding test result and assess the patient's comprehension of the test outcome.
- Reinforce risk-reduction plan discussed in pretest counseling session.
- Provide educational materials on hepatitis C prevention and risk-reduction strategies.
- Discuss resources available to patient within the VA health care system and community. Strongly encourage patient to utilize mental health, substance abuse programs and other resources/referrals at VA Medical and Vet Centers.
- Provide a list of resources within the VA health care system and community that may address the needs of the patient.
- Document posttest counseling, risk-reduction plan discussed and referrals made.
**Indeterminate Results:**

- This means that it is uncertain as to whether or not the patient has hepatitis C. The patient could be in the process of forming antibodies, or other viral or immune factors are present that are not related to hepatitis C. In addition, this result could indicate a laboratory processing error.
- Additional screening and/or antibody testing is needed to make a formal diagnosis.
- Document posttest counseling, risk-reduction plan discussed and referrals made.

**Positive Results:**

- Inform the patient that antibodies were detected in his/her blood, suggesting that the patient may be infected with the hepatitis C virus. This result does not indicate whether infection is acute, chronic, resolved or an incorrect result.
- Evaluate the patient’s emotional status upon receiving test result.
- Discuss the necessity for confirmatory testing. Explain to the patient that the antibody tests are not fail-safe and can yield incorrect results.
- Discuss the natural history of hepatitis C, emphasizing that while the virus can cause significant morbidity and impair the quality of life, only a minority of infections leads to life-threatening complications.
- Discuss how the virus is transmitted.
- Discuss how the virus is not transmitted.
- Discuss resources available to the patient within the VA health care system and in the community. Identify VA resources for further assessment, evaluation and support.
- Provide a list of resources for the patient within the VA and in the community.
- Discuss issues of disclosure with patient such as notifying others such as household members, sexual partners, and health care providers.
- Emphasize and illustrate ways to maintain wellness:
  - Avoid alcohol
  - Practice good nutrition
  - Exercise
  - Encourage patient to check with his/her health care provider before beginning new medications including herbal treatments
  - Encourage the patient to get vaccinated against hepatitis A virus and hepatitis B virus to prevent superimposed infections if he/she has not had these illnesses or been vaccinated previously
- Identify when the patient will return for confirmatory testing and/or medical evaluation.
- Explain to the patient that supplemental tests may help refine the diagnosis.
- Encourage the patient to discuss results with all sexual or IV drug-sharing partners. Make recommendations for partner testing and where testing is available. Provide a list of resources within the community for partner or family testing.
Document posttest counseling, risk-reduction plan discussed and referrals made.

CDC Recommendations for Patients Who Receive Positive Hepatitis C Virus Test Results

1. **Protect the liver from further harm**
   - Avoid alcohol consumption
   - Do not start new medications, including herbal or over-the-counter medications, without consulting a physician
   - Get vaccinated for hepatitis A if liver disease is present

2. **Minimize the risk of transmission to others**
   - Do not donate blood, body organs, tissue, or semen
   - Do not share appliances that may have blood on them, such as toothbrushes, dental appliances, razors and nail clippers.
   - Cover sores or open wounds on the skin to prevent spreading of infectious blood or secretions

3. **Persons with hepatitis C who have one long-term steady sex partner do not need to change sexual practices**
   - Explain that the risk of transmitting the virus to the uninfected partner is low, but not absent
   - Discuss the risk with the partner and the possibility of the need for counseling and testing
   - Discuss the consistent and effective use of barrier precautions, e.g. latex condoms, which may further lower the risk of transmission

4. **Persons with hepatitis C should be evaluated for the presence or development of chronic liver disease**
   - Assess biochemical test results for evidence of liver disease
   - Assess the severity of liver disease
   - Discuss and evaluate possible treatment strategies according to current practice guidelines with a knowledgeable specialist

5. **Other important counseling points**
   - Hepatitis C is not spread by sneezing, hugging, coughing, food or water, sharing eating utensils or drinking glasses, or casual contact
   - Persons with hepatitis C should not be excluded from participating in normal, everyday activities, such as work, school, play, childcare, etc.
   - Hepatitis C support groups may help and educate the patient in dealing with the infection. Taken from The United States Department of Veterans Affairs website last update January 10, 2013 *Hepatitis C Prevention and Counseling Guidelines for VA Health Care Practitioners; Healthcare Providers, Hepatitis C* http://www.hepatitis.va.gov/provider/guidelines/testing-prevention-counseling.asp#56X