Oregon

Local Health Department
Hepatitis C Needs Assessment

Final Report
November 2005

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Purpose and Background

Background

In 2003 Dr. Ann Shindo was hired as the State Hepatitis C Coordinator within the Acute and Communicable Disease Prevention branch of the Office of Disease Prevention and Epidemiology, Oregon Department of Human Services (DHS). Prior to this time there were no state-directed protocols for HCV education, prevention, or management. The main responsibilities of the State HCV Coordinator were to: 1) conduct an ongoing needs assessment of LHD's abilities to serve persons with HCV; 2) create a clearing house of HCV materials and resources; and 3) develop training modules for persons doing HCV counseling and testing.

Additionally, with the approval of the DHS budget in August, 2003, a directive for the development of a statewide HCV strategic plan was issued. The HB 2045 budget note indicated that:

> *"By January 2005, the Department of Human Services is to design a plan for statewide education efforts concerning Hepatitis C, and for prevention and management of the disease. In developing the plan, the Department shall consult with the public, patient groups and organizations, state agencies, service providers and suppliers, local public health departments, public health and clinical laboratories, research scientists, health care associations and other involved with Hepatitis C."*

The LHD HCV needs assessment was commenced shortly after Dr. Shindo was hired. The ***purpose*** of the local health department (LHD) hepatitis C (HCV) needs assessment was to identify strengths and gaps related to HCV services delivered in public health settings in the State of Oregon. The infrastructure available for administration of hepatitis A and B vaccine was also documented.

It was hoped that the results of this inquiry would be useful to the Statewide Viral Hepatitis Planning Group, which was charged with the task of developing the statewide strategic plan to address HCV education, prevention, and management. Additionally, the results from this needs assessment may assist local public health jurisdictions learn best HCV practices from their

colleagues around the state as well as inform state programming and resource allocation decision-making.

Methodology

Nine LHD staff were interviewed in-person by the State HCV Coordinator to determine the key constructs relevant for the HCV needs assessment. Four people represented urban LHDs and five represented rural LHDs. Eighteen open-ended questions were then drafted and piloted with 20 LHD personnel attending a harm reduction HCV and injection drug use educational training in either Pendleton or Roseburg, Oregon during November 2003. These eighteen original items were restructured for clarity, and the needs assessment questionnaire was sent electronically to all LHDs in the state between December 2003 and April 2004.

Thirty-five LHDs in 34 health jurisdictions completed the 18-item questionnaire. These numbers represent the fact that thirty-five public health offices within thirty-four regional public health jurisdictions exist in Oregon. Sixteen of these interviews were conducted over the telephone with the primary researcher reading the questions to respondents and entering verbatim answers into a word processing program. Everyone interviewed by telephone had access to a hard copy of the questionnaire at the time of interview. Local health department staff from the 19 remaining jurisdictions completed the questionnaires without prompts from the primary researcher and sent their responses either through the U.S. mail, e-mail, or fax. The respondents were either front-line public health staff or nursing staff. In some cases, more than one staff member worked in cooperation to provide the most comprehensive and accurate information for their LHD. The 18 questions were as follows:

- When is HCV screening done in your community?
- Where is screening occurring?
- How many screening tests are performed each month?
- Who pays for HCV screening?
- If screening costs were paid would more screening occur?
- What type of screening counseling and education is occurring?
- What type of post-test notification is occurring?
- What types of referrals are given to HCV-positive clients?
- What is the general confidence level in positive referrals?
- Are certain risk groups targeted for HCV screening?
- What type of surveillance is occurring?
- What type of community collaboration is occurring?
- What type of HCV outreach is occurring?
- What are the greatest public health strengths in the community?
- What are the greatest HCV-specific needs of the community?
- What type of HCV education is needed?
- What type of hepatitis A and B vaccine infrastructure is in place?

- What are the hepatitis A and B services available from the LHD (above and beyond state-required case investigation and follow-up)?

Item responses, by county, were entered into a word processing program verbatim as they appeared on the completed questionnaires. The primary researcher reviewed transcripts for key themes and consistent responses.

Results: Narrative

Circumstances of HCV Screening and Counseling

A. When, Where, How, and Who (Appendix B, Tables 1 through 6)

> *"If the client has insurance, the insurance is billed. If the client has no third party coverage, the client pays based on a sliding scale fee. The county pays the balance."*

Thirty (86%) of the 35 LHDs responded that they provided HCV screening. The majority of LHD staff (22) indicated that if a person had a history of injection drug use they provided an HCV screening test. Ten other LHD staff suggested that they screen upon request regardless of risk history. The majority of screening was done at "all" clinics. Many of the most rural counties in the state have one clinic that addresses all public health inquiries. Thus, there is little distinction between Family Planning, STD and HIV settings. STD and HIV clinics were specified as the HCV screening site for the majority of the remaining LHDs.

The average number of screens per month ranged from 0 to 76. This latter number reflects the number of screens in the largest urban county and was removed from the analyses to avoid skewing the data. On average, LHDs reported performing approximately four screenings per month across the State of Oregon. The most frequent monthly number of screens was two, three, and four, depending on the county. In total, excluding the largest most actively screening county, approximately 110 HCV screening tests were performed per month statewide in 2003.

Determining who pays for screening costs is important information for program-developers and policy makers. Eighteen of the LHDs said that they sought more than one source to pay for the HCV screen. The sources listed most often were the client, the Oregon Health Plan, and finally the county if no other source of payment could be identified. Six of the counties refused to screen if the client could not pay the laboratory costs. One county in the state was able to pay screening costs through a federal grant, which has since ended.

To determine if laboratory costs were a major deterrent for screening LHD staff were asked, "*If labs were paid by another source would your county screen more*?" Twenty-one of the LHDs reported that they would screen more and many indicated that they would be "*very*" willing to do so. Four respondents left this question blank. Nine respondents said they would definitely not screen more even if lab costs were paid, citing the lack of a follow-up care infrastructure and the need for additional staff resources as barriers. Moreover, one county indicated that they would not screen more because, "*Liver function tests costs are*

too prohibitive so don't even screen. Money would be needed for photocopying, postage, secretary time for log and mailings, and non-free educational materials."

In terms of who they screen, 16 respondents acknowledged that people with a history of injection drug use were a target group that they identified through a risk history. Eight of the respondents said that they screened anyone who was identified as a member of a CDC recommended target group. Other risk factors of interest mentioned by LHD staff were military history, on-the-job needle-sticks, HCV-positive sex partners, HIV, tuberculosis, history of nasal drug use, tattoos or piercings, and history of incarceration.

B. Counseling, Notification, and Referrals (Appendix B, Tables 7 through 10)

> *"We discuss: the etiology of hepatitis infections in general and the concern and need for [confirmatory] testing for HCV; the ways in which HCV is transmitted; and the long term impact of a positive test."*

Half of the respondents said that basic HCV education was the primary counseling strategy at the screening visit. Basic HCV information included risk factors for transmission, the significance of a positive screening test, and potential health consequences. Some counties also provided written HCV educational materials.

Thirteen of the county LHDs went beyond the basic level of HCV education and covered additional topics during the screening interview. The additional topics typically included harm reduction counseling and prevention of secondary transmission, needle exchange program schedules (where available), information about alcohol and drug effects on the HCV-affected liver, referral to alcohol or drug treatment, access to written and web-based HCV educational materials including support group websites, and additional referrals to social services, immunization and treatment.

Post-screen notification procedures ranged from basic HCV education (as described) and opportunities for hepatitis A or B vaccinations to an array of various service referrals. Eight of the counties provided basic HCV education and pamphlets only. Twenty-one counties reported offering "*multiple*" referrals to addictions services, mental health, housing, social services, the Oregon Health Plan, HAV and HBV vaccinations, or harm reduction services (e.g. syringe exchange programs). Two counties indicated that they provided referrals to in-house primary health care clinics during the post-test notification process.

Specifically, 18 of the respondents referred HCV-positive clients to a primary care practitioner or a "medical home" within the community. Eleven made referrals to the Oregon Health Plan, 10 made referrals to either gastroenterologists or hepatologists, 7 to alcohol or drug treatment programs, and 5 LHD staff made mental health referrals. (*Note*, the numbers add to more

than 30 as several respondents made referrals to numerous providers). It was also acknowledged that not very many of the referred clients had insurance or a primary "medical home," and many of the LHD staff suggested that they would attempt to work with clients to access services. These HCV-positive patient referrals should not be confused with actual follow-up after positive test notification.

The confidence that LHD staff had in their referrals for positive clients varied widely. Six of the respondents indicated that it was up to the client to follow-through on referrals and that LHD staff had no way to monitor such activities. Seven respondents indicated that they had no idea what level of confidence they should apply because they had no way of tracking cases once they left the LHD. The majority of the respondents noted "*Low confidence*" in their referrals; most were in the low to middle confidence level. Only five LHDs rated their confidence level high. Several of the LHD staff identified reasons why they had medium or low confidence in their referrals. "*The system is overloaded", "[confidence] is questionable due to lack of insurance resources*", and "*no insurance or money for care*" point out the reasoning for this belief.

C. Surveillance (Appendix B, Table 11)

> *"The communicable disease (CD) office keeps a log of antibody positive cases. If any of these cases are confirmed, we contact the provider to see if the person has an acute illness."*

During the time of this survey Oregon reporting guidelines required clinicians to report all **acute** cases of HCV to the LHD. However, many laboratories send positive HCV reports to the LHDs (even though they were not required to by statute at the time). LHDs were not required to conduct any further investigation of these laboratory reports. Subsequently, the degree of record keeping regarding HCV-positive laboratory reports varied significantly from county-to-county. Sixteen counties indicated that they kept some form of hard copy file containing all HCV-positive lab reports. Five counties had developed databases that included provider-derived data without direct LHD client contact. Nine of the counties that screened for HCV had no record keeping or identified surveillance mechanism.

Community Involvement, Capacity, and Needs

A. Community Collaboration (Appendix B, Table 12)

The multidimensional needs facing many of the people who have chronic HCV will require a comprehensive and collaborative care structure that includes primary health care providers, gastroenterologists, public health, addictions treatment, mental health services, and HIV co-infection specialists, as well as social support and community safety-net resources. When asked what form of HCV-related community collaborations the LHDs were engaged in, twenty-three

respondents noted that they did not collaborate with community partners or service agencies. Although fifteen respondents indicated that they desired more collaboration, very few identified a plan to engage potential partners. Twelve counties identified some form of community collaboration. At the time of interview these twelve LHDs had fostered partnerships with liver specialists, jail health, plasma centers, first responders, mental health and addictions specialists, HIV outreach workers, community-based organization staff, primary care providers, school-based health clinic staff, State Adult and Family Services staff, and pharmacists.

B. Community-Based Outreach (Appendix B, Table 13)

Twenty-two counties had no type of community-based outreach at the time of interview. Seven respondents indicated that they desired partnerships with either the state or community groups to begin some form of outreach (e.g. syringe exchange program). The remaining 13 respondents with some form of community-based outreach provided services to county jails, addictions services, media to promote health campaigns, and schools. Six counties specifically mentioned that they had some form of combined HIV and HCV outreach to jails within their community.

C. Strengths of the Public Health System (Appendix B, Table 14)

In an effort to evaluate the infrastructure that LHDs had in place to build HCV programs, each interviewee was asked what they viewed as their public health system's greatest strength. Twenty-one respondents said that they had "*strong in-house collaboration and integration*" regarding the services that they provide. Fourteen of the 35 LHDs indicated "*strong community collaborations or partnerships*" as their public health system's greatest strength, although 2 of the 14 did not report that they had any significant community collaborations with respect to HCV. However, since our questionnaire did not inquire about the nature of these other collaborations, these collaborations may have been centered on other public health issues of interest, such as HIV, outbreak management, or bioterrorism preparedness.

> *"Good communication with health providers in community and all county employees pretty much know each other"*

Additionally, one respondent believed that they had the ability for "*a rapid public health resp*onse."

D. Greatest HCV Need (Appendix B, Table 15)

"Money for testing and education and follow up with HCV positive clients"

Funding for screening, access to care for the uninsured, vaccines for hepatitis A and B, as well as appropriate surveillance to understand the magnitude of the HCV epidemic were the most cited financial and staff resource needs. Fourteen respondents said that general HCV education and increased provider and community awareness were a great need in their communities. Seven individuals cited the need for referral networks in their community, as they felt that screening for HCV without such resources would be inappropriate. Other needs that emerged from the data included state program development and policy guidance, HCV prevention programs targeted toward youth, health care access for all clients, outreach, community-specific HCV plans, surveillance mechanisms, increased vaccine opportunities, and addictions-specific HCV services. Three counties said that their greatest need was to establish a syringe exchange program. One respondent suggested that decriminalizing injection drug use and viewing it as an addiction, not a crime was an important need.

Hepatitis C Education

(Appendix B, Tables 16a through 16d)

Most LHD staff indicated that everyone (including the general public) could benefit from some form of basic HCV education. Consistent with this, LHD staff felt that they themselves could benefit from education regarding the referral resources available. Ten LHDs reported that education regarding local and statewide HCV resources and service provision infrastructures was needed. Education needs regarding screening and risk history protocols were also articulated. Customized education programs for rural counties, HCV field investigation and reporting guideline clarification were also important to some LHD staff. Also mentioned were educational needs related to interpretation of lab results, HCV-related stigma reduction strategies, and identification of acute symptoms.

LHD staff suggested basic HCV education as the primary educational need of CBO staff in their communities. Access to printed resources, referral information and IDU-specific information were the next most commonly stated educational needs of CBOs. LHD staff also indicated that some of their CBO colleagues could benefit from education on outreach protocols, transmission risks, current treatment protocols as well as an overview of hepatitis A, B, and C.

Many LHD staff indicated that there were no HCV-specific support groups in their counties. Basic HCV educational resources for clients, and how to start a support group were the most commonly identified educational needs for support group staff. Screening protocols, who to screen, symptoms of HCV,

mental health and advocacy skills were also suggested as good educational topics for this group of potential community partners.

LHD staff reported that most providers in their counties were in need of some form of basic HCV education, including criteria for testing and risk history assessment. Continuing medical education credits were suggested as a potential mechanism to fill this need. Education regarding referral sources, printed materials for clients, how to partner with LHDs, difference between acute and chronic HCV, best practice guidelines, updates on the most current research, how to work with stigmatized clients, and core public health messages were all regarded as educational needs for health care providers. In-service health care provider education by hepatologists from Oregon Health and Sciences University was also mentioned as a potential opportunity for enhancing provider knowledge in the area of HCV prevention and management.

Vaccine Specific Information

A. Provision of Hepatitis A and B Vaccine (Appendix B, Tables 17 & 18)

At the time of interview free special adult project vaccines against HAV and HBV were available to all thirty-five county health departments through the State Immunization Program. Thirty-one of the counties had acquired some of the vaccine at the time of interview. All 31 LHDs that had free vaccine provided it to high-risk adults under specific circumstances. The majority of LHDs (21) indicated that they would ***only*** provide hepatitis vaccine when it was freely available from the State. Several factors influenced the degree to which any given LHD provided the free hepatitis vaccine to adults. Eleven respondents specified that they only provided this free vaccine if clients could pay an administration fee of anywhere between $10 and $20; seven indicated no such fee was necessary for vaccine provision. In-house partnerships and collaborations were also noted as part of a necessary infrastructure for vaccine delivery.

To determine if LHD staff perceived the existence of an adequate HAV and HBV infrastructure from which to expand targeted vaccinations of HCV positive people, they were asked *"If hepatitis A and B vaccines were provided to you for free, is there an infrastructure for delivery to high risk clients available in your county?"* Eighteen of the respondents said that they would have sufficient infrastructure to administer vaccines if they were free, and six indicated that they would consider expanding the current vaccine infrastructure if free vaccine were supplied regularly. Four counties felt they had sufficient infrastructure but would need more personnel to provide hepatitis vaccinations, and four counties said that they would <u>not</u> vaccinate more even if vaccine were supplied because there would still be insufficient personnel to administer the vaccines to high-risk adults.

B. Hepatitis A and B Prevention (Appendix B, Tables 19 & 20)

All thirty-five of the LHD staff interviewed conducted routine investigations and provided contact management for cases of hepatitis A and B. Additionally, a handful of counties provided hepatitis A and B education for people at risk or for those who have HCV. Venues for this included the food handler's card programs, family planning clinics, traveler's clinics, waiting room display racks of printed education materials, and protocols regarding vaccine prophylaxis and immunoglobulin dissemination related to outbreak investigations. Partnering with community groups and education of the general public were cited as part of LHD's hepatitis A and B prevention efforts in five of counties.

Conclusions

Although it is clear that nearly every LHD in the State of Oregon provided some level of hepatitis prevention services, there were large gaps in the type of services that LHDs were able to deliver. The most notable gaps were, and remain today, the lack of funding for HCV screening, surveillance, and education, and a lack of funding and staff resources for hepatitis vaccination of adults who are at high-risk for hepatitis A and B, or even C. These identified resource gaps have produced a public health delivery system that is not adequately equipped to serve persons living with HCV in this state.

To begin to address the gaps and needs identified by this HCV needs assessment, the State Hepatitis C Coordinator, in collaboration with LHDs and other community-based partners, has begun to undertake the following steps:

- Identification of best practices within county LHDs and diffusion of innovation to other counties that are equipped to deliver HCV prevention services;
- Identification of private and public partners to assist in identifying and procuring funding for HCV prevention activities at the LHD level;
- Identification of HIV prevention activities at the LHD level where HCV messages could be integrated;
- Development of strategic DHS partnerships to utilize existing infrastructures for HCV education, prevention, management, surveillance, and policy;
- Development of a HCV advisory board to help implement the strategic plan approved by Oregon Legislature; and
- Continued HCV education, capacity building, and information dissemination at the local LHD and county front-line levels.

Appendix A LHD Questionnaire

Please write your name:_____

What county do you live in?_____

Where do you work?_____

Hepatitis C Needs Assessment Questions

Please do not leave any responses blank – if a question does not apply to your situation, please write in N/A.

1. **a**) Please describe when/in what circumstances Hepatitis C (HCV) testing is done in your county health department. (**IF** you do not do HCV testing in your health department, please skip to question #7).

   b) Approximately how many HCV screening tests do you perform per month? _____

2. Please indicate where HCV testing occurs in your county health department (E.G. Family planning clinic, STD/HIV clinic, other, etc.).

3. **a**) Please describe who pays for HCV screening tests. (E.G. Does the state, county, the client, a health plan, a CBO help defray the $14.00/test cost?)

   b) IF the lab costs were paid by another source would you screen more? YES NO

4. Please describe what type of counseling or education you provide to people who receive screening tests for HCV.

5. Please describe what type of surveillance you do regarding Hepatitis C beyond responding to reports from physicians – ***IF*** any. (E.G.. Do you do any follow-up of patients reported by labs or keep a record of the number of positives, lab information only, etc.).

6. Please describe what your post-test notification procedure entails (E.G. Counseling, brochures, or other patient materials, Hepatitis A and B vaccine or vaccine recommendations, referral, etc.).

7. Please describe the type of referrals that are given to clients who test positive for HCV (or say they are HCV positive). (E.G. To OHP, A&D services, private providers, gastroenterologist, alternative and complimentary providers, mental health service providers, support groups, other for confirmatory tests, etc.).

8. Please describe your level of confidence that the HCV positive clients that you refer are being provided with appropriate care.

9. Please describe your collaboration with community-partners regarding Hep C education, prevention, and/or management. (**NOTE**: if you currently do not have collaborative relationships regarding HCV services, describe the partnerships that *you would like to have*).

10. Please describe circumstances under which you provide vaccine for Hepatitis A and B to at-risk adults. (E.G. Only provide vaccine when made available through the state, with special grant money, all the time, etc.).

11. If vaccine for Hepatitis A and B were provided to you for immunization of HCV-positive at-risk adults, please describe what type of infrastructure you would have in place to disseminate/provide this vaccine. (**NOTE**: If none currently exists, please describe what you would like to see in place regarding Hep A & B vaccine administration to at risk adults).

12. Who are the target groups for HCV in your community? (E.G. The CDC suggests that the following people are at-risk for Hepatitis C, and should be tested - those people who:)
    - ♦ Served in the military during the Vietnam-era;
    - ♦ Were treated for blood clotting problems prior to 1987;
    - ♦ Were informed that they received blood from a donor who later tested positive;
    - ♦ Received blood or organs prior to 1992;
    - ♦ Have been on long-term hemodialysis;
    - ♦ Have abnormal liver enzyme tests;
    - ♦ Ever injected drugs (even once);
    - ♦ Experienced a job-related needle-stick.

13. Please describe the outreach efforts that are currently in place to reach people at-risk for HCV in your county. (**NOTE**: If there is not currently any such outreach, please describe what type of community-based outreach efforts would work in your community).

14. Please describe what types of HCV-related <u>information</u> or <u>education</u> you think that the following could benefit from:

    a) County LHD Staff
    b) Community-Based Organizations (e.g. drug treatment facilities, mental health groups, etc.)
    c) Medical Providers
    d) Support Groups

15. Please describe your county's greatest needs regarding Hepatitis C education, prevention, and management.

16. What are some of the strengths within your community public health delivery system that would facilitate HCV education, prevention, and treatment programs? (E.G. Are there any existing programs such as STD clinics or HIV counseling/testing sites where HCV activities could be integrated – or do you have community partners that would be key resources in such an endeavor?).
17. **Outside of standard state-required acute Hepatitis A investigation and follow-up protocols** – Please describe what your county health department has for education or outreach for adults at risk for **Hepatitis A**.

18. **Outside of standard state-required acute Hepatitis B investigation and follow-up protocols** – Please describe what your county health department has for education or outreach for adults at risk for **Hepatitis B**.

THANK YOU FOR FILLING OUT THIS QUESTIONNAIRE

Please return attached questionnaire responses to: ann.shindo@state.or.us.
or Fax @ **971-673-0178**

Appendix B Result Tables, Theme Summaries

The following data provide the number of LHDs that responded within the context of each of the key themes. For questions 1, 5, and 12-20, the denominator is 35. The remaining questions were directed solely at LHDs that conducted HCV screening; for these questions the denominator is 30.

It should be noted that the sum of these responses may total more than 35 (or more than 30, for questions directed solely at the 30 LHDs who perform HCV testing), because LHDs may have given more than one common thematic response per question; these items will be denoted with ****.**

Table 1. ***When is HCV screening done in your community? (N=35)*****

Theme	# Responses within Theme
If client presents with a history of appropriate risk	22
Anyone who requests screening	10
Do not screen	5
Screen in County Jail	5
Other Responses:	
When clients are referred by alcohol and drug treatment staff	2
When clients are referred by local physician	1
Work with first responders to screen them yearly	3
Only if client requests **and** they can pay the fee	2

Table 2. ***Where is screening occurring? (N==30)*** ******
Note: five counties do not screen for HCV; subsequent N = 30 unless otherwise noted

Theme	# Responses within Theme
ALL LHD clinics rolled into one (STD,HIV,FP)	19
STD/HIV clinics	7
Family planning clinic	2
Communicable disease clinic	1
County jail	5

Table 3. *How many screening tests are performed each month? (N=27)* [a]

Theme	# Responses within Theme
Total within Oregon*	186
Mean**	4.0
Median**	4.0
Range**	1-15
Most common numbers of screens reported:**	2, 3, & 4
2 screens per month	17%
3 screens per month	17%
4 screens per month	17%

*Total number of monthly screens includes Multnomah County's 76 screens per month
Statistics **do not include Multnomah County's 76 screens/month as they skewed the data.

[a] **Three counties did not respond to this question**

Table 4. ***Who pays for HCV screening? (N=25)*** [b]

Theme	# Responses within Theme
More than one source of payment sought (e.g. client, OHP, health plan, county pays)	18
Client must pay or no screening occurs	6
Perception that State pays for screening costs	1

[b] **Five counties were unsure how screening costs are paid**

Table 5. ***If screening costs were paid would more screening occur? (N=35)***

Theme	# Responses within Theme
Yes, would screen more	21
No, would not screen more	9
Unsure or no response	4
Would possibly screen more	1

Table 6. ***Are certain risk groups targeted for HCV screening? (N=25)[e]***

Theme	# Responses within Theme
People with injection drug use history	16
All CDC recommended risk categories	8
Others were people with a history of:	
Military service	2
On-the-job needle stick	4
Abnormal liver enzymes	5
Sex partners who were at risk for, or had HCV	3
HIV	1
STDs	1
Blood exposure through a medical procedure	4
Multiple sexual partners	1
Health care work	1
Hemodialysis	2
Piercings or tattoos	1
Snorting drugs	1
First response work	1

[e] Five counties did not respond to this question

Table 7. ***What type of screening counseling and education is occurring? (N=30)***

Theme	# Responses within Theme
Multiple topics discussed (basic HCV topics with additional mental health, addictions, immunization, or social service referrals)	13
Basic HCV education (transmission and prevention discussion as well as some written materials or internet resources provided)	15
Less than Basic HCV education (nothing provided)	2

Table 8. ***What type of post-test notification or counseling is occurring? (N=30)***

Theme	# Responses within Theme
Multiple topics are discussed (basic HCV topics with additional specialist [hepatologist or gastroenterologist], primary care, Oregon Health Plan, mental health, addictions, immunization, or social services referrals)	21
Basic HCV 101 information including educational pamphlets	8
Do nothing	1

Table 9. ***What types of referrals are given to HCV-positive clients? (N=28)[c]*****

Theme	# Responses within Theme
Primary care physician or medical home	18
Specialists (hepatologist or gastroenterologist)	10
Oregon Health Plan	11
Alcohol and drug treatment	7
Mental health	5
HCV-specific education	1
School-based health clinic	1
Harm reduction program	1
Internet	1
Social services (non-specific)	2
Support group	1

[c] **Two counties did not respond to this question**

Table 10. ***What is the general confidence level in positive referrals? (N=27)***[a]
Note: Three key themes with multiple responses were provided by participants.

Theme	# Responses within Theme
A. Client Follow Through (N =6)	(**one** answer per respondent unless otherwise noted)
Not good in general because we give them info and leave it up to them [client] , we offer hepatitis vaccine series so we can track that, but if [client] declines we may never see them again.	
Ones [clients] that keep appointments who are being referred out are getting appropriate care.	
Depends on if they [clients] follow through, if yes, I am confident in their medical or counseling care.	
If they [clients] are motivated then we can help them. If they are into their drug scene then there is nothing to be done until they decide to help themselves.	
I would guess that many [clients] don't follow through with recommendations but, I have no way of really knowing.	
B. Lack of Appropriate Resources (N = 7)	
There is a general confidence in the quality of care but usually the client's lack of resources is the reason that they don't get appropriate care.	
Questionable due to lack of insurance.	
Very low, money and no insurance are big problems.	
The LHD currently does not follow-up on referrals…it is difficult to assess….they [clients] tend to fall out of the LHD system so unless they return for some other service such as family planning or immunizations we may not see them again.	
Confidence = 6 [scale 1-10], the systems are overloaded. Mental health services are not available any more, alcohol and drug [treatment] is severely under-funded and services are unavailable to most non-disabled HCV-positive clients.	
Unsure, we don't have places to refer people.	
Most clients probably don't go to their primary care provider because of lack of funds. We have no process for tracking this.	
C. Confidence in Health Care Providers (N=14)	
Better now that we've been trained by the harm reduction coalition on HCV among injection drug users.	
From what we've seen ok, the concern is that no-one is testing because we go for long periods of time without getting a positive, what would be nice is if we could have more CME training.	

Table 10. *continued*

Theme	# Responses within Theme
Providers in county becoming aware of HCV testing and are more for it.	
Really impressed with at least a couple of physicians that are dealing with it. I've worked with other physicians from other counties and they're not on top of it.	
Probably 3 on a scale of 1-10, some MDs have release of information for patients so then we can follow-up with them.	
100% confidence	
Not sure, this may have improved with the opening of Coastal Family Health our local community health center.	
Low	
Maybe 75% [confident], some providers here have personality disorder problems that they are off-putting to our somewhat marginalized clients. IF they can be engaged in care, the care itself is good quality.	
Fair, could be improved	
Confident	
The ones I have spoken with seem to be receiving appropriate care. I think there may be a lack of adequate education among providers.	
I believe we are doing an excellent job with our clients in terms of care and screening.	

[a]**Three counties did not respond to this question**

Table 11. ***What type of surveillance is occurring? (N=30)***

Note: At the time that the survey was conducted, counties were not required to investigate all persons with positive laboratory tests for HCV, only persons with acute illness.

Theme	# Responses within Theme
Maintain a file of hard copies of positive lab slips	16
Have an HCV-specific database	5
No record keeping or surveillance	9

Table 12. ***What type of community collaboration is occurring? (n=35)*****

Theme	# Responses within Theme
No collaboration at time of interview	23
Some collaboration at time of interview	12
Future collaboration was desired	15
Some collaboration with:**	
Gastroenterologist	1
Jail health	3
Plasma center	1
First responders	1
Mental health	2
HIV outreach	1
Alcohol and drug treatment centers	2
Community-based organizations	3
Medical providers	5
Multiple collaborations (many of those listed as well as school-based health clinics or DHS Adult and Family Services)	3
Pharmacies	1

Table 13. ***What type of HCV outreach is occurring? (N=35)*****

Theme	# Responses within Theme
No HCV outreach	22
Desired HCV outreach	7
Conducted outreach at time of interview to a variety of sites:	13
Alcohol and drug treatment centers	5
Injections drug users/Needle exchange programs	4
Community-based organizations	1
Jails	6
Local media	2
Community-based family planning clinic	1
Primary care physicians in county	1
Men who have sex with men (MSM)	1

Table 14. ***What are the greatest public health strengths in the community? (N=35)[d]*****

Theme	# Responses within Theme
Good in-house [within the local health department] communication, collaboration, or integration	21
Relationships with community partners	14
Relationships with jail health	1
Rapid public health response within community	1

[d] Four counties did not respond to this question

Table 15. *What are the greatest HCV-specific needs of the community? (N=35)***

Theme	# Responses within Theme
Financial and staff resources	15
Education and increased provider and community awareness	14
Networks for referrals	7
State guidance	1
Targeted HCV services for youth	2
Access to medical care for clients	3
Outreach	1
Syringe exchange programs	3
Community plan	2
Surveillance mechanisms to identify the scope of problem	1
More vaccine for hepatitis A and B	2
Alcohol and drug specific HCV services	1
Decriminalization of injection drug use	1

Table 16. ***What type of HCV education is needed for:? (N=35)*****
Note: This question asked local health department staff to identify the educational needs of themselves as well as staff at community-based organizations, health care providers, and support groups in their county.

16a. *Education needed for local health department employees*

Theme	# Responses within Theme
Current HCV resources and HCV service provision infrastructure	10
Basic HCV education (transmission, prevention, care)	10
Most current treatment modalities	7
Educational and support resources for clients, locally and statewide	6
Testing protocols and who should be tested	3
Multimedia patient education resources	2
HCV-specific risk	2
Other identified educational needs:	
Reporting guideline clarification	1
Money for patient care	1
Education to reduce stigma associated with IDU	1
Acute symptom identification	1
Customized education for rural communities	1
Field investigation techniques specific to HCV	1

16b. *Education needed for community-based organization staff*

Theme	# Responses within Theme
Basic HCV education (transmission, prevention, care)	12
Resource lists and multimedia resources for clients	10
IDU-specific education	2
Other identified educational needs:	
Most current treatment modalities	1
Risks for transmission	1
Outreach guidance	1
Overview of hepatitis A, B, and C	1

16c. *Education needed for support groups*

Theme	# Responses within Theme
Basic HCV education (transmission, prevention, care)	5
Resource lists for clients	5
How to start a support group	3
Multimedia resources for clients	3
Other identified educational needs:	
Risks factors and who should be screened	1
Symptoms related to HCV	1
Mental health information	1
Current research	1
Most current treatment modalities	1
Advocacy skills	1
How to access health care	1

16d. *Education needed for health care providers*

Theme	# Responses within Theme
Who to test and what kind of risks to screen for	8
Continuing medical education in basic HCV education (transmission, prevention, care)	6
Most current treatment modalities	5
Resource lists for referring patients	5
Information to give clients	5
How to better partner with local health departments and others	2
Other identified educational needs:	
Clarification of state reporting guidelines	1
Differences between acute and chronic HCV	1
Money for care	1
Best practice guidelines	1
Current research	1
OHSU in-service education	1
Prevention information	1
Core HCV public health messages	1
How to reduce stigma among marginalized clients	1

Vaccine Specific - Information

Table 17. ***What type of hepatitis A and B vaccine infrastructure is in place in your LHD? (N=35)*****

Theme	# Responses within Theme
Provide vaccine to high-risk adults	31
High-risk people receive vaccinations with state-supplied vaccine only	21
Clients must pay for vaccine administration costs	11
Anyone can get vaccine – no cost prohibition	7
High-risk people only	3
Other responses:	
Collaborate with primary care physicians in county	1
Use bioterrorism funding for reservists to get vaccinated	1
Household sexual contacts with HCV-positives given vaccine	1
Multiple options for vaccine administration are available	1

Table 18. ***If hepatitis A and B vaccines were provided to you for free – is there an infrastructure for delivery available in your county? (N=32)[a]***

Theme	# Responses within Theme
Have sufficient infrastructure to administer vaccines	18
Would like to expand on existing infrastructure to provide more vaccines	6
Do have infrastructure but need additional personnel resources to vaccinate more	4
Do not vaccinate and probably would not even with free vaccine	4

[a]**Three counties did not respond to this question**

Table 19. ***What are the hepatitis A services available from the LHD (above and beyond state-required case investigation and follow-up)? (N=26)[e]*****

Theme	# Responses within Theme
Multiple LHD-based venues for vaccine delivery	7
Multiple education efforts for hepatitis A	5
People at-risk are offered vaccine and education	4
If people request hepatitis A vaccine and information it is given	3
If client or state pays for vaccine we will administer	2
Other responses:	
Food handlers card education	1
General education to anyone	2
Traveler's clinic vaccines and education available	3
Outbreak investigation	1
Vaccine administration at family planning clinics	1

[e] Nine counties reported no additional services above and beyond those required by the state**.**

Table 20. ***What are the hepatitis B services available from the LHD (above and beyond state-required case investigation and follow-up)? (N=27)[f]*****

Theme	# Responses within Theme
Multiple LHD-based venues for vaccine delivery	8
Multiple education efforts for hepatitis A	6
People at-risk are offered vaccine and education	5
Other responses:	
Traveler's clinic vaccines and education available	3
If client or state pays for vaccine we will administer	3
Partner with community members to do hepatitis B vaccinations and education	2
Anyone who asks can receive hepatitis B vaccinations and education	2
Hepatitis B public education forums	1

[f] Eight counties reported no additional services above and beyond those required by the state.