

## RESEARCH OBJECTIVES

This study aims to identify hepatitis B prevention and care activities, including referral, surveillance, testing, vaccination, and treatment of hepatitis B at community health centers (CHCs) throughout the U.S. affiliated states and territories. The study also assesses CHC workforce capacity and infrastructure in providing services to improve the management and prevention of hepatitis B.

## BACKGROUND

Hepatitis B is a silent epidemic that affects the liver, can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. Asian Americans, Native Hawaiians, and other Pacific Islanders (AA&NHOPIs) account for over half of the 1.3 million chronic hepatitis B (HBV) cases and half of the deaths resulting from chronic HBV infection in the U.S. This is an unnecessary disparity considering that HBV and liver cancer can be prevented by a vaccine. Since early detection of HBV is so easily missed due to its silent transmission and progression, there needs to be increased awareness about HBV and a seamless system of HBV prevention and treatment services, according to the Institute of Medicine's Report on Viral Hepatitis.

The Association of Asian Pacific Community Health Organizations (AAPCHO) received a mini-grant from the Center for the Study of Asian American Health, New York University School of Medicine† to assess CHC hepatitis B education, screening, vaccination and treatment services; and identify CHC organizational healthcare providers' capacity and needs to prevent new HBV infections and effectively manage care for chronic hepatitis B in primary care settings.

## METHODOLOGY

### Instrument

An 18-page (69 items) medical provider questionnaire and 19-page (72 items) directors of health education questionnaire.

A five-page questionnaire (50 items) was adopted from a needs assessment instrument developed by The Measurement Group for the Health Resources and Services Administration's HIV/AIDS Bureau. Along with the questions used in the referenced document, AAPCHO included additional questions to identify the unique needs of CHCs serving AA&NHOPIs. A draft of the instrument was pilot-tested for content validity with program administrators and clinicians of CHCs. It was revised several times and tested on medical providers for succinctness and brevity. The final version incorporated feedback from all testers.

### Sample

Thirteen (13) AAPCHO member centers, in the United States and the affiliated Pacific Islands' CHCs were sent questionnaire packets.

### Procedure

A packet of ten (10) questionnaires, a cover letter, and a self-addressed return envelope were sent to the Medical Director of each CHC included in the sample. A letter was also sent to the Executive Director of these centers advising them of the questionnaires and encouraging their center's participation. A cover letter was included in each questionnaire packet explaining the two needs assessment surveys being conducted by AAPCHO's Hepatitis B Program, and stating that the return of these questionnaires by September 2009 would make the CHC eligible for a \$1,000 incentive. Follow-up phone calls and email reminders were completed and reminder packets were re-sent if they had not returned the surveys. Final calls were made in August 2009 to the medical and health education directors who did not respond.

## RESULTS

### Health Education/Organizational Survey

Twelve (12) CHCs responded to the questionnaire. All respondents identified as a CHC in the U.S. and its affiliated states reported annual budgets ranging from \$3 million to \$33 million, with a median of \$10.7 million (see Table 1. Hepatitis B Prevention Budget). Most organizations responded that addressing hepatitis B (HBV) is within their mission but many have been providing hepatitis B prevention services for fewer than 10 years. 88% of respondents indicated that less than 1% of their annual budget is spent on HBV prevention. The main source of funding for HBV prevention was from states. The next major sources of funding were federal and county funds. 73% of respondents indicated that they had less than 1 full-time employee dedicated to HBV prevention, care and treatment, despite the fact that all respondents offered HBV services.

The most common HBV services offered were hepatitis screening, HBV vaccination, and STD prevention and treatment. 38% of respondents indicated that HBV positive patients utilize early intervention services and language interpretation for service referrals most frequently. 42% of respondents indicated that there is some coordination between HBV prevention and HBV medical-related services, while 100% of HBV prevention services are integrated into the health center. 38% of CHCs responded that an-in house specialist would greatly enhance their HBV service provision and that additional funding is essential to comprehensively addressing HBV in their patient population (see Table 2. Hepatitis Treatment Referrals).

### Medical Provider Questionnaire

The questionnaires were completed by 75 medical providers. 87% were medical doctors, and 50% had fewer than 10 years of experience total and fewer than 8 years working with infectious diseases.

Eighty-nine (89%) of respondents believe that HBV is an above average or huge problem for AA&NHOPIs, though more than half of the CHCs had fewer than 10% of patients with HBV.

When asked, most providers cited substance abusers as the group at risk for HBV (97%) while only 82% cited foreign-born, 89% cited sexual activity and 73% for pregnant women. Only 60% of providers responded that they normally recommend HBV counseling and testing for foreign-born patients (see Table 3. Community Health Center HBV Service Needs).

Providers from health centers are divided on whether they have funding for HBV vaccination services for uninsured patients. 90% agree that they can offer HBV screening and testing for uninsured patients, and 65% agree that they have clear guidelines of whom to screen. Respondents were evenly divided whether a protocol is in place for comprehensive HBV monitoring, indicating that some CHCs have clear protocols for HBV management and some do not. Most do not have a HBV specialist (62%) on staff so patients are referred out (see Table 4. At-Risk Groups and Tested Groups).

While most CHCs in this study have some coordination between prevention and medical services for HBV. 86% of providers believe that care for HBV patients should include social, family, health, drug treatment and mental health services to better serve HBV patients.

A majority of the medical providers agree that cross-training makes HBV programs more effective (63%) but 90% feel they would benefit from additional HBV patient/provider communications trainings. Seventy-five (75%) responded that training on management and treatment of HBV would be useful to them.

## CONCLUSIONS

A large proportion of medical providers is aware that hepatitis B is a significant medical problem for AA&NHOPIs, and they routinely screen patients regardless of insurance status. However, providers also agree that the management and prevention of hepatitis B deserves better coordination on all levels. The lack of coordinated services allows for more patients to fall through the cracks. The need for increased and frequent HBV cross-training for medical providers and other allied health staff would greatly enhance the provision of HBV services at CHCs. In addition, funding

### TABLE 1. HEPATITIS B PREVENTION BUDGET

| Annual budget spent on hepatitis B prevention | Percent |
|---|---------|
| 0% of budget                                  | 12.5    |
| <1% of budget                                 | 75.0    |
| >1% of budget                                 | 12.5    |
| Total   | 100.0   |

*We do not provide HBV treatment services, so the patient is referred elsewhere.*

|                           | We have adequate hepatitis B resources for treatment referrals. |                   |          |         |       |                | Total |
|---------------------------|---|-------------------|----------|---------|-------|----------------|-------|
|                           | Don't know/not applicable                                       | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |       |
| Don't know/not applicable | 0   | 1                 | 0        | 1       | 2     | 0              | 4     |
| Strongly Disagree         | 1   | 0                 | 2        | 0       | 3     | 3              | 9     |
| Disagree                  | 0   | 0                 | 2        | 4       | 6     | 2              | 14    |
| Neutral                   | 0   | 1                 | 3        | 2       | 3     | 0              | 9     |
| Agree                     | 1   | 2                 | 4        | 1       | 9     | 6              | 23    |
| Strongly Agree            | 0   | 3                 | 5        | 0       | 2     | 3              | 13    |
| Total                     | 2   | 7                 | 16       | 8       | 25    | 14             | 72    |

dedicated towards HBV prevention and care services are critical to meet the growing needs of the AA&NHOPi population and meeting the health needs of underserved communities, specifically for HBV chronic and at-risk patients. The findings from this study continue to support AAPCHO's ongoing and future hepatitis B projects, as well as the development and increased advocacy for hepatitis B prevention and treatment services. The findings also support the Institute of Medicine's recommendation for better coordination of hepatitis B management, treatment, and surveillance.

### TABLE 4. AT-RISK GROUPS AND TESTED GROUPS

| Which groups do you think are at-risk for hepatitis B?                       | Substance Abusers | Sexually Active Clients | Pregnant Women | All Clients | Foreign Born | Total |
|--|-------------------|-------------------------|----------------|-------------|--------------|-------|
| To which adult and youth clients do you normally complete an HBV assessment? |                   |                         |                |             |              |       |
| At risk for HBV (n)  | 73                | 67                      | 55             | 29          | 62           | 286   |
| Normally complete an assessment and believed at-risk (n)                     | 56                | 49                      | 46             | 11          | 46           | 208   |
| Percent of at-risk who normally complete an HBV assessment                   | 76.7%             | 73.1%                   | 83.6%          | 37.9%       | 74.2%        | 72.7% |

### TABLE 3. COMMUNITY HEALTH CENTER HBV SERVICE NEEDS

| Respondents were asked to assess their community health center's HBV service needs.               | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Don't Know |
|---|----------------|-------|---------|----------|-------------------|------------|
| Our clinic does not have funding for the services requested.                                      | 15             | 9     | 10      | 20       | 13                | 7          |
| Our clinic performs routine HBV screening as part of check-ups for all APIs regardless of health. | 25             | 17    | 8       | 16       | 6                 | 2          |
| We offer HBV screening & testing.   | 45             | 23    | 4       | 1        | 1                 | -          |
| We have clear guidelines for whom to screen for HBV.  | 29             | 20    | 12      | 12       | 1                 | -          |
| Our patients do not know what HBV is so I do not bother to screen for it.                         | 1              | 2     | 4       | 27       | 40                | -          |

### TABLE 2. HEPATITIS TREATMENT REFERRALS

|                           | We have adequate hepatitis B resources for treatment referrals. |                   |          |         |       |                | Total |
|---------------------------|---|-------------------|----------|---------|-------|----------------|-------|
|                           | Don't know/not applicable                                       | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |       |
| Don't know/not applicable | 0   | 1                 | 0        | 1       | 2     | 0              | 4     |
| Strongly Disagree         | 1   | 0                 | 2        | 0       | 3     | 3              | 9     |
| Disagree                  | 0   | 0                 | 2        | 4       | 6     | 2              | 14    |
| Neutral                   | 0   | 1                 | 3        | 2       | 3     | 0              | 9     |
| Agree                     | 1   | 2                 | 4        | 1       | 9     | 6              | 23    |
| Strongly Agree            | 0   | 3                 | 5        | 0       | 2     | 3              | 13    |
| Total                     | 2   | 7                 | 16       | 8       | 25    | 14             | 72    |