

## **Executive Summary**

### **Viral Hepatitis**

Substance users, particularly injection drug users (IDUs) are at high risk for hepatitis A virus (HAV), hepatitis B virus (HBV) and hepatitis C virus (HCV). Injection drug use (IDU) is the most common risk factor for HCV infection. It is the second largest risk factor for HBV infection and is also associated with significant risk for HAV infection.

Substance abuse treatment and community-based outreach programs, such as syringe exchange programs (SEPs) have consistently demonstrated their effectiveness in working with drug users to reduce behaviors that put them at risk for blood borne infectious diseases, including viral hepatitis.

### **The Viral Hepatitis Integration Project**

In 2004, the New York State Department of Health (NYSDOH) received a five year grant from the Centers for Disease Control and Prevention (CDC) to establish and enhance hepatitis screening, testing, prevention, and treatment in both drug treatment and substance use settings currently providing HIV services. Two SEPs and one Methadone Maintenance Treatment Program (MMTP) in New York City (NYC) were chosen to participate. These agencies and their outreach locations were situated in and around the South Bronx, an area with a high need for hepatitis and HIV prevention programs.

With the addition of the grant, the SEPs were able to offer the following services: an on-site Hepatitis Coordinator; HBV and HCV screenings; HAV and HBV vaccinations; referrals for evaluation and treatment of hepatitis C; hepatitis related support groups; and hepatitis educational materials. MMTP services were expanded to include a Hepatitis Coordinator, a Hepatitis Educator, on-site evaluation and treatment for hepatitis C positive clients, client-centered support groups and peer education as well as the availability of hepatitis educational materials.

Throughout the five year grant period, numerous evaluation activities were conducted, including an examination of hepatitis service delivery, awareness and utilization of VHIP, assessing the impact of VHIP and improving VHIP.

## **1. Hepatitis Service Delivery – Syringe Exchange Programs**

The Hepatitis Coordinator at the two SEPs recruited clients for HBV and HCV screenings and HAV and HBV vaccinations between November 1, 2005 and October 31, 2008. Follow-up services, i.e. screening results and subsequent doses of vaccine, were available to clients until April 30, 2009.

Eight hundred eight (808) clients received at least one hepatitis service at the SEPs during the recruitment period. Approximately 70% of these clients were male, 60% were over the age of 40, and two-thirds were Hispanic. Six hundred seventy-eight of the clients received at least one dose of HAV vaccine and 139 clients (20.5%) completed the series. At least one dose of HBV vaccine was administered to 672 clients. The first dose of HBV vaccine was administered pending the HBV screening results. After HBV screening results were available, it was determined that of the 672 clients, 341 were susceptible to HBV and thus in need of additional doses of vaccine. Seventy six (22.3%) of the vaccine susceptible clients completed the vaccine series. Seven hundred sixty-seven clients were screened for HCV and 272 (35.5%) of them were antibody positive. Of the antibody positive clients, 144 (52.9%) received their screening results from the Hepatitis Coordinator. One hundred (69.4%) of these clients accepted a referral for HCV evaluation and possible treatment and 50 of these clients (50.0%) attended their appointment.

## **2. Hepatitis Service Delivery– Methadone Maintenance Treatment Program**

Hepatitis service delivery data were collected on chart reviews of 300 clients randomly selected from 800 MMTP clients that completed the baseline client survey. Baseline chart reviews were conducted in August 2005 and updated periodically through February 2009.

Fifty-three percent of the clients in the sample were female, approximately 70% of the clients were over the age of 40, and two-thirds were Hispanic. Almost all of the clients in the sample received HAV screenings (97.4%) and two thirds (62.2%) of these clients completed the HAV vaccine series. Similarly, almost all (99.7%) of the clients were screened for HBV and 50.8% completed the HBV series. In addition, all clients in the sample were screened for HCV and over half of the HCV antibody positive clients (53.8%) received HCV viral load and genotype testing.

## **3. Awareness and Utilization of VHIP: Estimating VHIP Integration at the SEPs**

Four separate data sources provided information on the extent to which VHIP had become integrated into the SEP and MMTP service settings. The results revealed a consistent picture across data sources. Both SEP staff and SEP

clients were generally aware of the Hepatitis Coordinator and the nature and types of services provided through VHIP. Most staff had referred clients to VHIP and most clients had been approached and offered VHIP services by the Hepatitis Coordinator. Three of the four data sources produced an estimate of the percentage of total SEP clients that had been served (been vaccinated and/or tested) by VHIP. These data suggest that about one out of every four SEP clients had been vaccinated and/or screened for hepatitis during VHIP.

#### **4. Assessing the Impact of VHIP**

We were able to assess the impact of VHIP on hepatitis related knowledge, attitudes and beliefs, and detect any change in hepatitis related practices and behaviors by conducting staff and client surveys and focus groups throughout the project.

Overall, VHIP had a positive impact on the participating agencies, their staff and clients. Among MMTP staff, the impact was greatest among those that were exposed to the program the longest. However, improvements in proficiency were realized among all MMTP agency staff. High rates of staff turnover at the SEPs precluded any meaningful impact on knowledge, attitudes, or proficiency. Among clients, attitudes and beliefs regarding hepatitis and recall of services received improved from baseline to follow-up. Furthermore, focus group results suggested that the Hepatitis Coordinator was seen as the most central element in VHIP at the MMTPs and the SEPs.

#### **5. Improving VHIP: Focusing on Regular Users of SEP Services**

Rates of vaccine completion, receipt of screening results, and acceptance of follow-up care among HCV positives at the SEPs were all low. We were able to establish that a focus on regular users of SEP services could increase vaccine completion rates and the receipt of hepatitis screening results significantly. Overall, regular users were between 3 and 4 times more likely to complete the HAV vaccine series (2 or 3 dose regimen) and about twice as likely to complete the HBV vaccine series. Regular users were also significantly more likely to receive their HBV and HCV screening results: Nearly 70% of regular users received their HBV and HCV screening results, compared to about 40% of VHIP only and non-regular SEP user clients. Although regular users were more likely to receive their HCV screening results, they were no more (or less) likely to accept a referral for follow-up evaluation or to actually attend that referral, compared to VHIP only clients and non-regular SEP users.

#### **Conclusion**

Although completion of vaccines and return for screening results was low overall, 1,368 individuals received at least one hepatitis service or attended at least one hepatitis related support group. Countless other individuals received hepatitis

educational materials. Plus, individuals who received only one dose of vaccine still received some protection against hepatitis. More importantly, it is believed that many of these individuals would not be reachable through other more traditional venues where hepatitis services are available. Therefore, as a result of VHIP, many individuals have been educated, counseled, received hepatitis vaccinations, and are now aware of their hepatitis status so that when the time is right for them they can seek further treatment.

Based on the experiences with VHIP, several strategies for improving outcomes at the SEP sites have been identified. The first is examining why clients initially accept hepatitis screenings and/or vaccinations. For example, distinguishing those clients who actively seek out services from those who agree to participate based on prompting from Hepatitis Coordinators or program staff may be an important determinant of programmatic success. Another strategy is to focus on clients who routinely seek services at the SEPs. This can be accomplished by exploring the feasibility of prospectively identifying “regular users” of the SEPs to target for hepatitis services.

Other suggestions included intensive case management for a subset of HCV positive clients; securing greater agency “buy-in” up front, frequent trainings to address higher-than-anticipated staff turnover and lastly increasing contact with clients. Methods of achieving this include: conducting client assessments and creating individualized plans; collecting more detailed contact information from clients and updating the information as frequently as possible; providing frequent reminders for clients about their upcoming HCV evaluation appointment and due dates for HAV and HBV vaccines; making sure clients have an appointment card; providing escorts as necessary and providing HBV and HCV results to clients over the phone as a last resort.