HEPATITIS B VIRUS SCREENING, VACCINATION AND TREATMENT SURVEY OF MASSACHUSETTS HOSPITALS AND SELECT REFUGEE HEALTH ASSESSMENT PROGRAM SITES

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Executive Summary

BACKGROUNDS AND METHODS

The Massachusetts Department of Public Health (DPH) conducts robust hepatitis B virus (HBV) surveillance and strives to support the delivery of high-quality HBV management, from screening to treatment, to improve care outcomes across the Commonwealth. This report summarizes the findings of a 2025 survey of high-volume Massachusetts hospitals and select Community Health Center Refugee Health Assessment Program (RHAP) sites regarding HBV screening, vaccination, and treatment protocols. DPH engaged JSI Research & Training Institute, Inc. to facilitate the survey to inform policy-making and best practice guidance.

KEY FINDINGS

Key findings from the 27 respondents representing 20 facilities indicate variations in HBV management practices across departments. All survey respondents are specialist physicians. The study's results are organized into three main categories: screening and laboratory protocols, vaccination, and treatment approaches. Information and analysis of the RHAP site protocol and practice has been separated from the hospital data, and can be found in Appendix A. Of those who responded (n=23), 14 (61%) represented infectious disease departments, 5 (22%) represented gastroenterology departments, and 4 (17%) represented other departments.

Screening & Laboratory Protocol

While the majority of respondents indicate screening in surveyed facilities occurs in primary care (78%, n=18) and infectious disease (70%, n=16) departments, a lower percentage said that screening occurred in gastroenterology (57%, n=13), OB/GYN (48%, n=11), and emergency departments (22%, n=5), indicating potential missed opportunities for detection. In terms of populations screened, 39% (n=9) of respondents report screening all adults, while 30% (n=7) screen only adults with risk factors and 30% (n=7) screen pregnant persons. Though 70% (n=16) of respondents follow specific HBV screening guidelines, the specific guidelines varied, with infectious disease favoring CDC guidelines (n=8) and gastroenterology using AASLD (n=2). Twenty-two percent (n=5) of respondents report having HBV screening prompts integrated into their Electronic Health Records (EHRs). Regarding laboratory protocols, 35% (n=8) of respondents indicate their laboratory offers the HBV triple panel test, which streamlines diagnosis, and, half of the infectious disease departments report not using it. Thirty percent (n=6) of respondents indicate they have medical decision support documents available to interpret positive HBV serology, while others report varying levels of support or uncertainty. Finally, the availability and content of HBV screening education for clinicians varied considerably, with uncertainty about or lack of availability of formal training reported for risk-based, universal adult, and pregnant person screening.

Vaccination

The CDC recommends HBV vaccine for infants, children and adolescents younger than 19 who have not been vaccinated, adults aged 19–59, and adults 60 and older with risk factors for HBV.1 While 70% (n=16) of respondents indicate their department offers HBV vaccination, this varies widely by specialty, with 93% (n=13) of infectious disease departments offering it compared to 20% (n=1) of gastroenterology departments. Of the departments providing vaccination, 81% (n=13) offer it to adults aged 19-59 and adults 60+ with known risk factors, while 69% (n=11) provide it to adults 60+ without known risk factors but seeking protection. Additionally, 22% (n=5) of all respondents report having HBV vaccination prompts built into their Electronic Health Records (EHRs), with the most common prompts (60%, n=3) being for all adults aged 19-59.61% (n=14) of respondents report no process to review data on patients completing the full HBV vaccine series. Respondents indicate a preference for Heplisav-B, Engerix-B vaccines, and Twinrix. Providers reported preference for these vaccines are based on dosing schedule (62%, n=8) and improved patient outcomes (54%, n=7) as the main factors driving this decision.

Treatment

AASLD, CDC, and WHO offer guidelines for HBV management and treatment. Treatment can be provided by primary care providers or specialists, though referrals to specialists are common for those patients with more severe disease and providers with limited experience managing HBV. When asked how patients were cared for if they tested positive for active HBV infection, 74% (n=17) of respondents report their department monitors and treats patients who test positive, while 26% (n=6) refer patients to gastroenterologists, infectious disease specialists, or hepatologists.

Respondents report patient compliance (53%, n=8) is the most common barrier to long term care retention. Nearly two-thirds (65%, n=11) of respondents indicate their department does not have a protocol for long-term care retention while no respondents report their department has a process in place to review data on their care retention rate. While 65% (n=11) of respondents indicate there is a protocol for routine viral load testing, 29% (n=5) stated there is no such protocol. Among those who refer patients, referrals to gastroenterology were most common (83%, n=5), followed by infectious disease referrals (50%, n=3). Additionally, 66.7% (n=4) of these referral respondents confirm having a protocol for treatment linkage and care planning, while 33% (n=2) reported no such protocol.

Refugee Health Assessment Programs (RHAP)

Four RHAP programs participated in this survey, and all indicate that HBV screening takes place in their own organizations' primary care departments. All four programs screen all adults for HBV, while 50% (n=2) also screen adolescents under 19 with risk factors. Three (75%) RHAP respondents follow CDC HBV screening guidelines, and one (25%) indicate having HBV screening prompts in their Electronic Health Records (EHRs). Notably, all RHAP departments offer HBV vaccination and provide it to a wide range of populations, though only one respondent (33%) reported having a protocol for HBV vaccination.

LIMITATIONS

While providing valuable insights on HBV screening, vaccination, and treatment practice in Massachusetts hospitals, this report is subject to several limitations. A limited response rate from contacted hospitals with the majority of responses coming from specialists, may not fully represent the diverse practices across all Massachusetts facilities or adequately capture the role of primary care providers in HBV management. Furthermore, the high percentage of "Don't know/not sure" responses to several questions suggests a lack of consistent knowledge or clear protocols within the surveyed facilities, which can affect the interpretation of the overall prevalence of certain practices.

IMPROVING HBV PRACTICE IN MASSACHUSETTS

This report identifies several opportunities to improve HBV screening, vaccination, and treatment practices. First, comprehensive HBV education for all clinicians is crucial, as current training appears inconsistent or absent, leading to potential missed screening and treatment opportunities. Universal HBV screening across all departments is also needed to ensure no patients are missed, particularly in gastroenterology, OB/GYN, and emergency departments, where screening rates are lower.

Additionally, increasing utilization of the HBV triple panel test will streamline diagnosis and care, and embedding HBV screening prompts into Electronic Health Records (EHRs) will standardize care and reduce missed opportunities. Providing Clinical Decision Support within EHRs will aid clinicians in vaccine and treatment decisions, and routine review of HBV vaccination status with vaccination offerings is essential for prevention. Finally, implementing Quality Improvement practices for care retention will ensure long-term patient engagement and better health outcomes, addressing the common issue of patient compliance and loss to follow-up.