



Community-Based Services to Improve Hepatitis B Testing and Linkage to Care Among Hard-to-Reach Populations

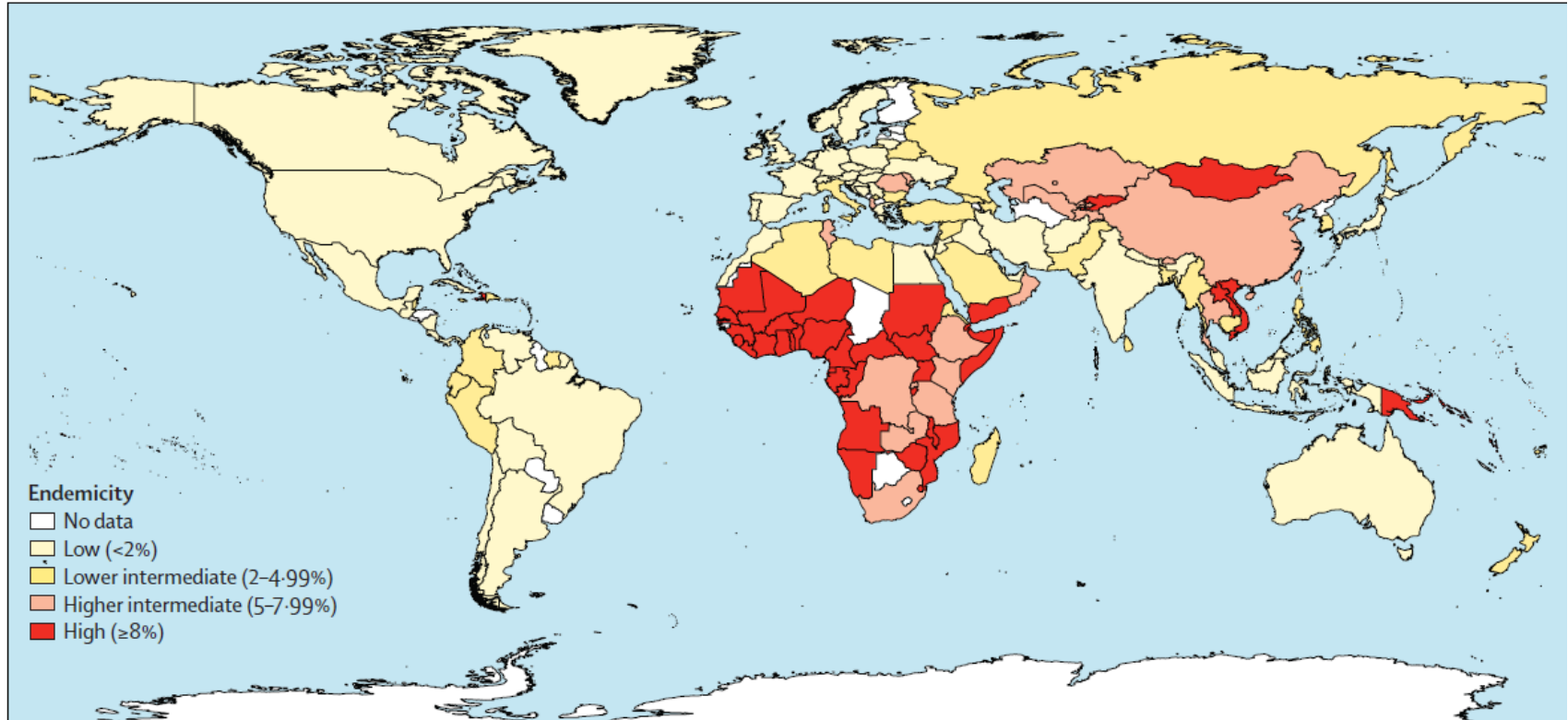
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Hep B United Webinar

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Global Hepatitis B Virus Surface Antigen Prevalence in Adults, 1957--2013



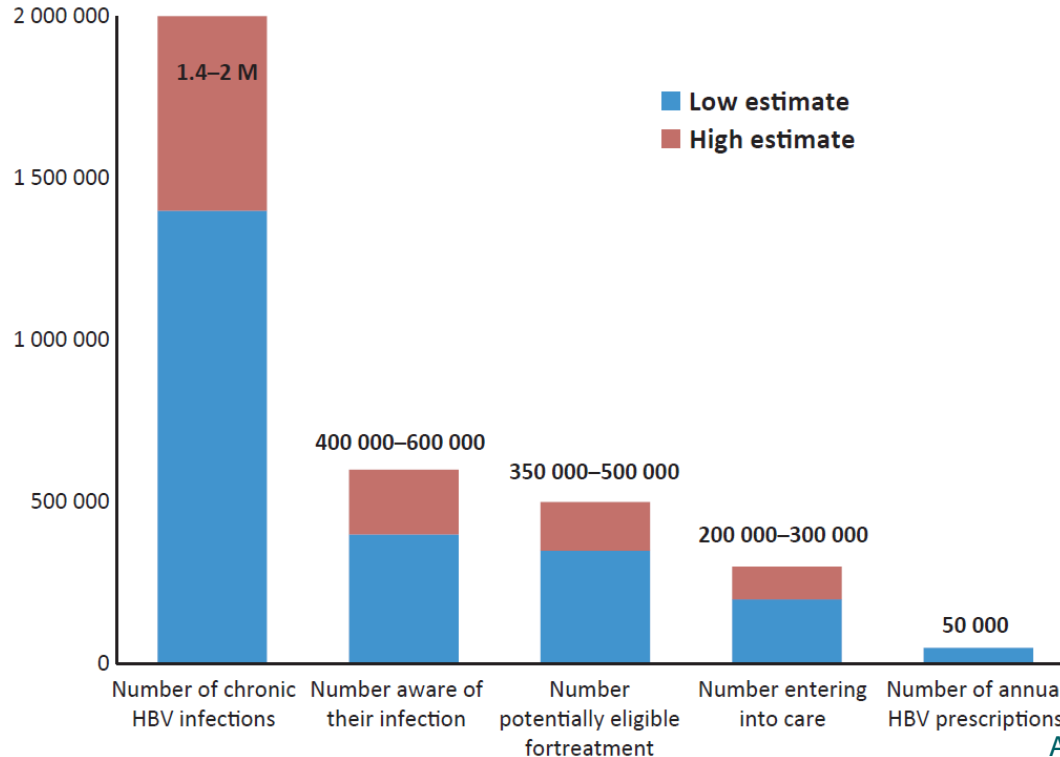
Burden of Chronic Hepatitis B Infection, United States

- **Prevalence: About 1 million chronic infections**
 - 65% unaware of infection status
 - 70% are non-U.S.-born
- **1 million immigrants enter the US annually**
 - >60% from intermediate-high HBV endemic countries
 - Top 5: China, Philippines, Vietnam, Korea, India

| | <u>Imported</u> | <u>U.S. - Acquired</u> |
|----------------------|-----------------|------------------------|
| Cases / year | 54,000 | 3,800 |
| Mortality | 24% | 15% |
| Deaths / year | 13,000 | 570 |

Based on NHANES, Mitchell et al. PLoS One 2011;6(12):e27717

Chronic Hepatitis B Care Continuum, USA, 2011



Adapted from: Cohen et al J Viral Hepat 2011

Purpose of Hepatitis B Testing and Care Program

- **To improve the capacity of healthcare providers and other stakeholders to serve populations of persons born in countries with intermediate-high HBV prevalence**
- **Goals:**
 - Increase testing of non-US-born persons for hepatitis B
 - Increase vaccination of susceptible persons
 - Increase linkage to ongoing, high quality HBV-directed care for persons identified with chronic hepatitis B

Community-based Hepatitis B Programs – Test and Link to Care

Interventions through Partnerships

Implement

1. Recruitment: Foreign-born persons
2. Screening: HBsAg and HBcAb/HBsAb

Coordinate

1. Community-outreach
2. Patient navigation
3. Other services

Partnerships

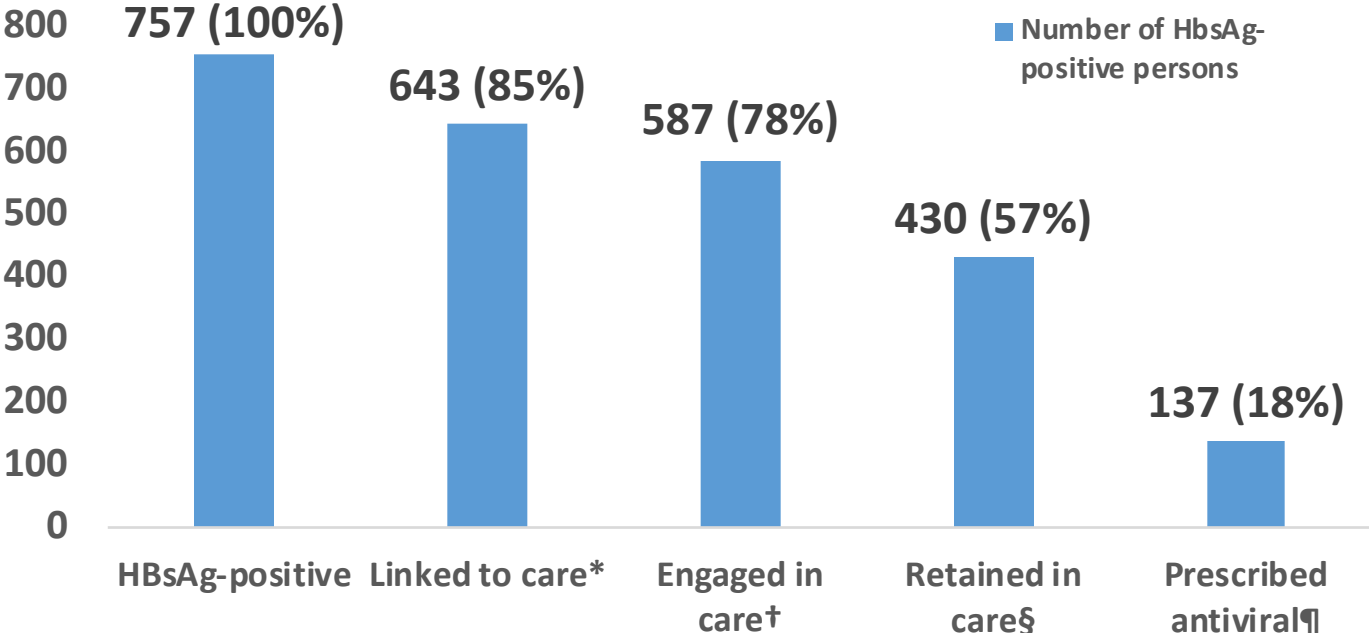
1. State and Local health departments
2. Community-based organizations
3. Medical care clinics
4. Specialty practices

Increase community and health professional hepatitis B awareness

Train of staff

1. Screening
2. Monitoring
3. Management
4. Referral practices

Hepatitis B Linkage to Care Continuum, Three U.S. sites, October 2014–September 2017



Abbreviation: HbsAg = hepatitis B surface antigen.
*Attended ≥ 1 medical visit; †Received hepatitis B e antigen, HBV DNA, and ALT testing;
§Attended ≥ 2 medical visits; ¶Antiviral treatment given

Unadjusted Odds Ratios for Selected Characteristics among Persons Participating in Three US Programs

| Factor | HBsAg-Positive | Linkage to Care | Antiviral Rx |
|---------------------|----------------|-----------------|-----------------|
| Male | 413 (55) | N.S. | 1.6 (1.1–2.4) |
| >50 years old | 239 (32) | 0.5 (0.3–0.7) | 2.0 (1.4–3.0) |
| Race, Asian | 602 (80%) | N.S. | N.S. |
| No Health Insurance | 121 (16) | 0.3 (0.2–0.4) | N.S. |
| Liver cirrhosis | 18 (2%) | N.S. | 13.1 (4.2–40.6) |
| HCC* | 9 (1) | N.S. | 24.6 (3–202) |

N.S.: Not statistically significant

*HCC: Hepatocellular Carcinoma

Hepatitis B Testing and Vaccination of 273 Household or Sexual Contacts of HBsAg+ Persons

| Household or sexual contacts | n (%) |
|---|------------------|
| Testing Results | 273 (100) |
| HBsAg+ | 39 (14) |
| Anti-HBc+/anti-HBs+ | 71 (26) |
| Anti-HBs+/antiHBc- | 101 (37) |
| Anti-HBc+ only | 12 (4) |
| Susceptible (negative to 3 HBV markers) | 50 (18) |
| Hepatitis B Vaccination Results | 50 (100) |
| HepB dose 1 | 37 (74) |
| HepB dose 2 | 32 (64) |
| HepB dose 3 | 25 (50) |

Best Practice Implementation Strategies

- Educational curricula
- Training protocols
- Patient navigation services
- Community outreach
- Screening events
- HBV testing voucher coupons
- Clinical decision support tools in EMR

Conclusion

- **Hepatitis B testing and linkage to care can be achieved among hard-to-reach populations through partnerships:**
 - Community organizations
 - Health centers
 - Public Health Departments
- **Household and sexual contacts of HBsAg+ persons should be tested and linked to care or vaccinated**
- **Patient navigators were critical for sustained linkage to care**

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