Hepatitis B among Asian Americans: Prevalence, Progress, and Prospects for Control

Presentation based on a review article in review with the World Journal of Gastroenterology, 2015

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Objectives

- Review the magnitude of the Hepatitis B (HBV) burden among Asian Americans
- Highlight the process being made to mitigate this burden
- Provide evidence based strategies for HBV control and prevention
# Hepatitis B Grants

## AANCART
**2002-current**
- Develop and disseminate of culturally appropriate, ethnic specific hepatitis B educational materials
- HBV education, outreach and training

## P01: Liver Cancer Control Interventions for Asian Americans
**2006-2011**
- RCT Lay Health Worker Interventions to increase serological testing for hepatitis B: Hmong, Korean and Vietnamese

## Thousand Asian American Study (TAAS)
**2012-2013**
- Screen 1,000 foreign born or children of foreign born from HBV endemic regions.

## Sacramento Collaborative to Advance Testing and Care of Hepatitis B (SCrATCH B)
**2014-2016**
- Improve identification and care for chronic HBV infection among 2,000 foreign born or children of foreign born from HBV endemic regions.
After tobacco use, chronic hepatitis B viral infections are the most important cause of cancer globally.

1 OUT OF 3 INDIVIDUALS HAVE BEEN INFECTED WITH THE HEPATITIS B VIRUS
Asian Americans and the Hepatitis B Burden

Per 100,000

- Asian Americans experience the highest incidence for cancers of the liver and intrahepatic bile (male: 21.2 versus 8.9 for Whites; female: 8.0 versus 3.0 White)

- Asian Americans experience the highest mortality rates for cancers of the liver and intrahepatic bile (male: 14.5 versus 7.3 for Whites; female: 6.0 versus 3.0 White)

110:1

- Most dramatically, the hepatitis B seroprevalence rate among foreign-born Asian/Pacific Islander women of childbearing ages was 8.9% compared to 0.08% for non-Hispanic White mothers for a disparity rate of 110:1

Who are Asian Americans?
Aggregated Asian American Data Masks Disparities

Asian Americans are the only racial population in the United States with a bimodal distribution for major demographic risk factors related to health outcomes: education, income, insurance status, and age
## Educational Attainment for selected Asian American Groups, 2011-2013

<table>
<thead>
<tr>
<th>Less than high school diploma</th>
<th>Bachelors degree or higher</th>
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</thead>
<tbody>
<tr>
<td>31.2%</td>
<td>12.37%</td>
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<tr>
<td>35.2%</td>
<td>15.2%</td>
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<tr>
<td>32.8%</td>
<td>15.6%</td>
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<td>28.9%</td>
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<td>43.9%</td>
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<td>14.3%</td>
<td>50.7%</td>
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<tr>
<td>4.9%</td>
<td>48.7%</td>
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<tr>
<td>8.4%</td>
<td>72.1%</td>
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<tr>
<td>7.7%</td>
<td>53.5%</td>
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<tr>
<td>7.5%</td>
<td>48.0%</td>
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</tbody>
</table>

### Source: U.S. Census Bureau, 2011-2013 3-Year American Community Survey
Difference in Median Household Income for Selected Asian American Groups from the Median Household Income for All Asian Americans, 2011-2013

- Asian Indian: $26,982
- Filipino: $9,901
- Taiwanese: $8,717
- Japanese: $-914
- Vietnamese: $-15,056
- Chinese: $-4,585
- Korean: $-16,361
- Thai: $-16,871
- Laotian: $-17,491
- Cambodian: $-19,085
- Hmong: $-23,331

Source: U.S. Census Bureau, 2011-2013 3-Year American Community Survey

*Mean income $71,580
Food Stamp/SNAP Benefits for Selected Asian Groups, 2011-2013

Source: U.S. Census Bureau, 2011-2013 3-Year American Community Survey
Estimated Cases of Imported Chronic HBV Infection by WHO Region of Origin, 1974-2008

Foreign born populations living in the US and prevalence of foreign born with CHB

Increasing HBV Screenings

- Culturally Appropriate and Ethnic Specific
  - Lay Health Worker Interventions
  - Community Based Organizations
  - Student Run Medical Clinics

- Physician In-Service
- CME
- Electronic Medical Records
- Electronic Prompts
- Telephone Banking
Recommendations to Mitigate the HBV burden among Asian Americans

1. Screen persons born in areas with >2% hepatitis B surface antigen (HBsAg) rates.
   - Ask persons which country they were born.
   - Encourage providers to recommend HBsAg testing for their at-risk Asian American patients.
   - Educate and encourage patients to ask their providers whether they should be tested for HBsAg.
   - Use typical Asian names from EHRs to determine if they have been tested for HBsAg and then to screen them at the next opportunity.
   - Collaborate with Asian American-serving organizations to hold screening events.

   - Verify that hospitals and birthing facilities are providing birth dose vaccinations.
   - If not vaccinated at birth, vaccinate. Note that in many states, verification of HBV vaccinations may be a requisite for school enrollment.

   * Note: serologically test for HBsAg first and after test results are known, determine if vaccination is appropriate.
   - Consider follow up vaccination programs for adults after serological testing for HBV for those who need vaccination.
“Longest journey begins with a single step....”