



Underestimation of chronic hepatitis B in APIs

A call for advocacy and action

Alison A. Evans, Sc.D.

Drexel School of Public Health/Hepatitis B Foundation


Chari Cohen, M.P.H.

Hepatitis B Foundation



Hepatitis B in the United States -- 2007

- Universal childhood immunization has reduced acute HBV infections overall
 - Rates increasing in some adult groups
- Chronic infection now reportable to NNDSS
 - Reliability of these data not yet known
- Chronic infection impact highest in
 - Asian-Americans
 - Immigrants




The CDC estimate of chronic
HBV prevalence:

1.25 million Americans



Where does this number come from?

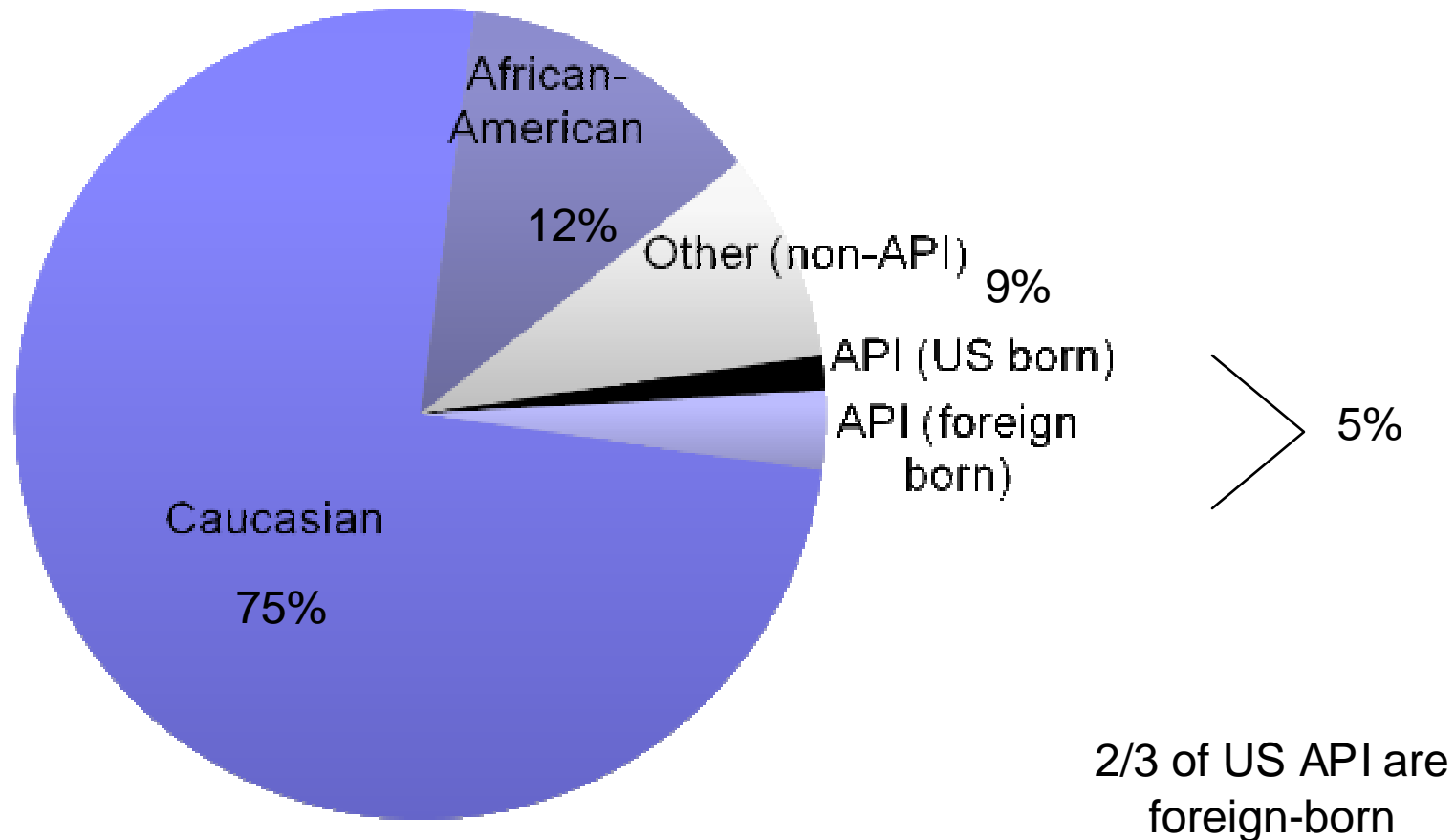
- Primary data source is the NHANES series
 - Representative sample of non-institutionalized persons residing in the United States.
 - Excellent data source for US overall
 - Focused on nutrition
- Serum banks available for disease prevalence studies after primary study aims met
 - Subsets have been tested for HBV, HIV, HCV, etc.



Who is missing/undercounted?

- Asian and Pacific Islanders (API)
- Other recent immigrants
- Undocumented
- Institutionalized (e.g. prisoners)
- Military

Racial distribution of the US population



Source: 2005 American Community Survey



API in America

- Very high risk group for chronic HBV infection
- Small proportion of total population
- Large proportion of these are immigrants
- Problems of access, cultural appropriateness lead to undercounting



Sources of prevalence data

- Majority of US residents : 0.42% (from NHANES)
- For US-born API: 1.4%
- For foreign-born API: 8.9%
 - API estimates from Asian Liver Center, Stanford survey of pregnant women



Estimated HBV prevalence by racial group

Group	Est. HBV prevalence	Total infected
White, Black, Other	0.42%	1,157,137
US-born API	1.4%	58,406
Foreign-born API	8.9%	774,027
Total		1,989,570



What does this mean?

- The current estimate of 1.25 million significantly underestimates the prevalence of chronic HBV infection in the US
- A conservative estimate of the true prevalence is about 2 million
 - Difference is largely foreign-born API
 - Recalculation based on public data sources
 - Does not account for others not counted in NHANES

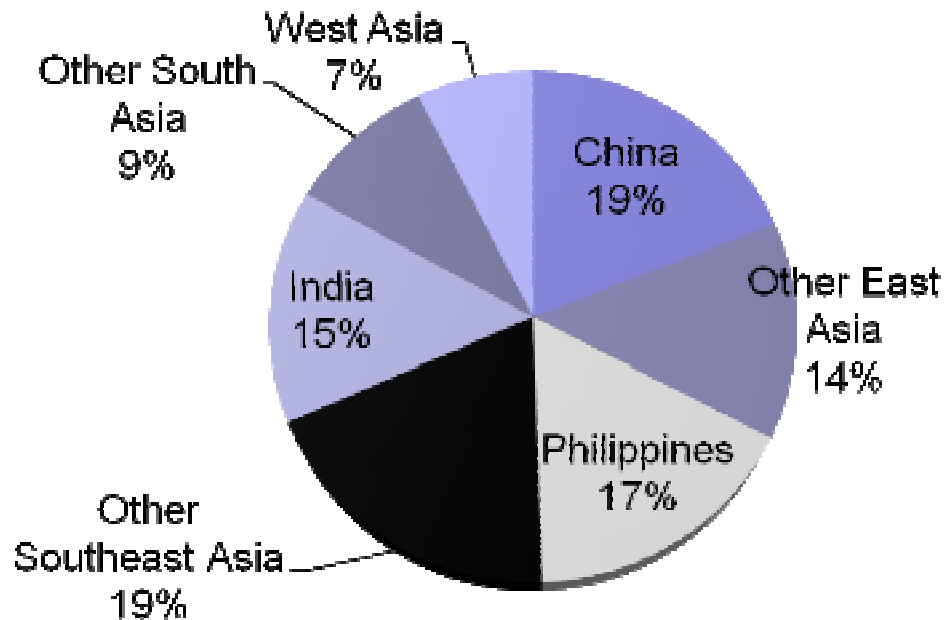


Significance for API health

- APIs, especially immigrants, remain undercounted in population data sources
 - Undercounting -> underestimation of health care needs
- Between 2000 and 2005, 1.3 million new immigrants from Asia
 - Est. 115,700 HBV infected

Limitations and Needs

- Ethnic diversity of US APIs not accounted for
 - Lack of data sources by place of birth



Place of birth for Americans born in Asia, American Community Survey 2005



How can we do better?

- Better counting
 - New immigrants
 - Ethnic/national subgroup differences
- Local community involvement
 - US regions differ
- Culturally-appropriate public health interventions to reduce burden of HBV