

BACKGROUND

- Since 1980 the number of African immigrants and refugees (AIR) in the U.S. has increased by over 750%.¹ In 2015, there were 2.1 million AIR living in the U.S. accounting for approximately 4.8% of the U.S. immigrant population.²
- Once in the U.S., AIR face many barriers to accessing health services including complicated, fragmented health care systems, cultural and linguistic barriers, and real or perceived stigma.³ An estimated 50,000 African immigrants live in the Greater Philadelphia, PA region.⁴
- Primary liver cancer (hepatocellular carcinomas) is the 3rd deadliest cancer worldwide, with 5-year survival rates of only 15%. There are few effective treatments for liver cancer, and we must rely on prevention and early detection in order to save lives.
- Approximately 78% of liver cancer is attributable to chronic infection with hepatitis B (HBV) or hepatitis C (HCV) infections.
- Globally, there are an estimated 292 million HBV infections⁵ and 71 million HCV infections⁶ (figures 1 and 2 show geographic images of where prevalence occurs).
- The number of cases and rates of HBV and HCV infection in Southeastern PA are unknown. The lack of information is due to low rates of testing in the overall population and lack of data on the immigration status of those who are tested.

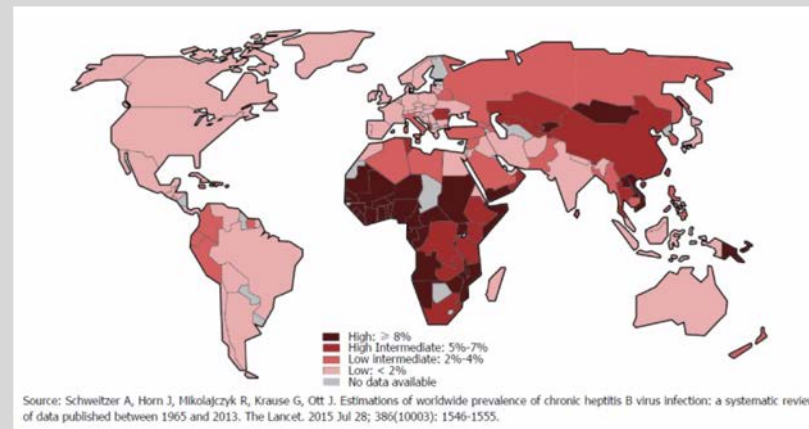


Figure 1: Global HBV Prevalence

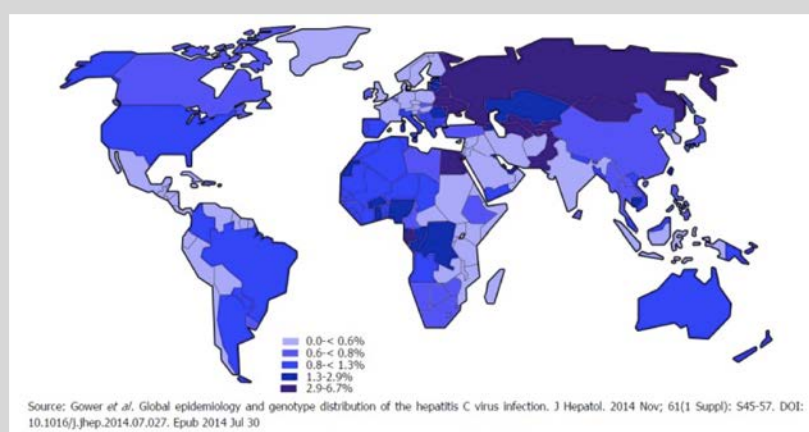


Figure 2: Global HCV Prevalence

METHODS

To reduce morbidity and mortality due to liver cancer in the African immigrant and refugee communities in Greater Philadelphia, the Hepatitis B Foundation (HBF), African Family Health Organization (AFAHO) and Hepatitis Training, Research and Education (HepTREC) collaborated to conduct culturally and linguistically competent, community-based education and screening in the Philadelphia region.

Objectives:

- Provide education to at least 200 individuals about HBV and HCV infection and liver cancer among African immigrant community members in the Greater Philadelphia region.
- Provide screening for HBV and HCV among to at least 150 African immigrant and refugees in Greater Philadelphia.
- Provide linkage to care and support for 100% of HBV and HCV positive individuals.

RESULTS

Thus far, we have tested 109 high-risk individuals at six screening and educational events. No HCV infections have been discovered. Over 160 individuals have been educated on hepatitis B risk, testing, transmission and prevention. Descriptive results for those screened, and test results showing immunity and infection status of HBV can be found in tables 1-3. Overall, 6.4% tested positive for HBV, 43.1% were immune and 53.2% were susceptible (need vaccine). Individuals testing positive have been entered into patient navigation for follow-up care. Those needing HBV vaccination have been referred to available vaccine services.

Table 1. Basic demographic data on the population screened

Demographics	Frequency (N=109)	Percent (%)
Sex		
Male	46	43
Female	62	57
Age		
<18	2	2
18-29	17	16
30-39	29	26
40-49	30	28
50-59	13	12
>60	16	15
Not reported	2	2
Education Level		
Less than High School	9	9
High School	26	26
Technical/Vocational	8	8
Some College	18	18
College Degree	26	26
Graduate Degree	13	13
Insurance		
Yes	70	65
No	38	35
Regular Doctor		
Yes	77	73
No	29	29

Table 2. Country of origin for high-risk screened for HBV and HCV

Demographics	Frequency	Percent (%)
Country of Origin		
USA	4	4
Sierra Leone	45	42
Ghana	4	4
Nigeria	1	1
Ivory Coast	1	1
Mali	3	3
Burkina Faso	2	2
Niger	1	1
Liberia	30	28
Togo	2	2
Sudan	11	10
St. Vincent & The Grenadines	1	1
Saudi Arabia	2	2
Morocco	1	1

Table 3. Self reported family history of HBV and liver cancer and HBV infection and immunity status for all individuals screened

	N=109	
	Frequency	Percent (%)
Self Reported Family History of HBV		
Yes	2	2
No	67	62
I do not know	38	36
Self Reported Family History of Liver Cancer		
Yes	88	83
No	18	17
I do not know		
Hepatitis B Infection (HBsAg)		
Positive	7	6
Negative	98	91
Unclear	3	3
Hepatitis B Immunity		
Immune	47	44
Not immune	58	54
Unclear	3	3



Figure 3. Hepatitis Training for AFAHO case managers.



Figure 4. HBV and HCV screening in Philadelphia

DISCUSSION

- Unfortunately, HBV and HCV infections are often asymptomatic for decades as liver damage progresses and liver cancers develop. Given the asymptomatic nature of HBV and HCV, screening is essential to identify those infected and at-risk for liver cancers.
- Screening for HBV and HCV remains low. Worldwide, less than 10% of HBV and 20% of HCV has been diagnosed. In the U.S., less than 35% of HCV and 25% of HBV has been diagnosed.
- Once infection is identified, anti-viral treatments can eliminate infection (for HCV) and prevent additional liver damage for HBV, reducing the risk of cancer. Monitoring for liver cancer can identify cancers at an early and more treatable stage.
- The key to saving lives is ensuring that individuals infected with HBV or HCV are diagnosed and linked with appropriate care.

CONCLUSIONS

This study highlights the need for increased HBV and HCV testing and collection of disaggregated data among AIR populations, which can be combined with targeted language and messaging of cancer prevention and education. There are still challenges, including stigma and myths associated with HBV and HCV, limited knowledge and awareness among providers and communities, limited resources, and low prioritization of these diseases. Multi-sectoral partnerships can help overcome challenges and improving screening among AIR populations.

CITATIONS

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ACKNOWLEDGEMENTS

This project is made possible through the Prevent Cancer Foundation Community Health Grant.