

# **Liver Cancer and Hepatitis B: An overview**

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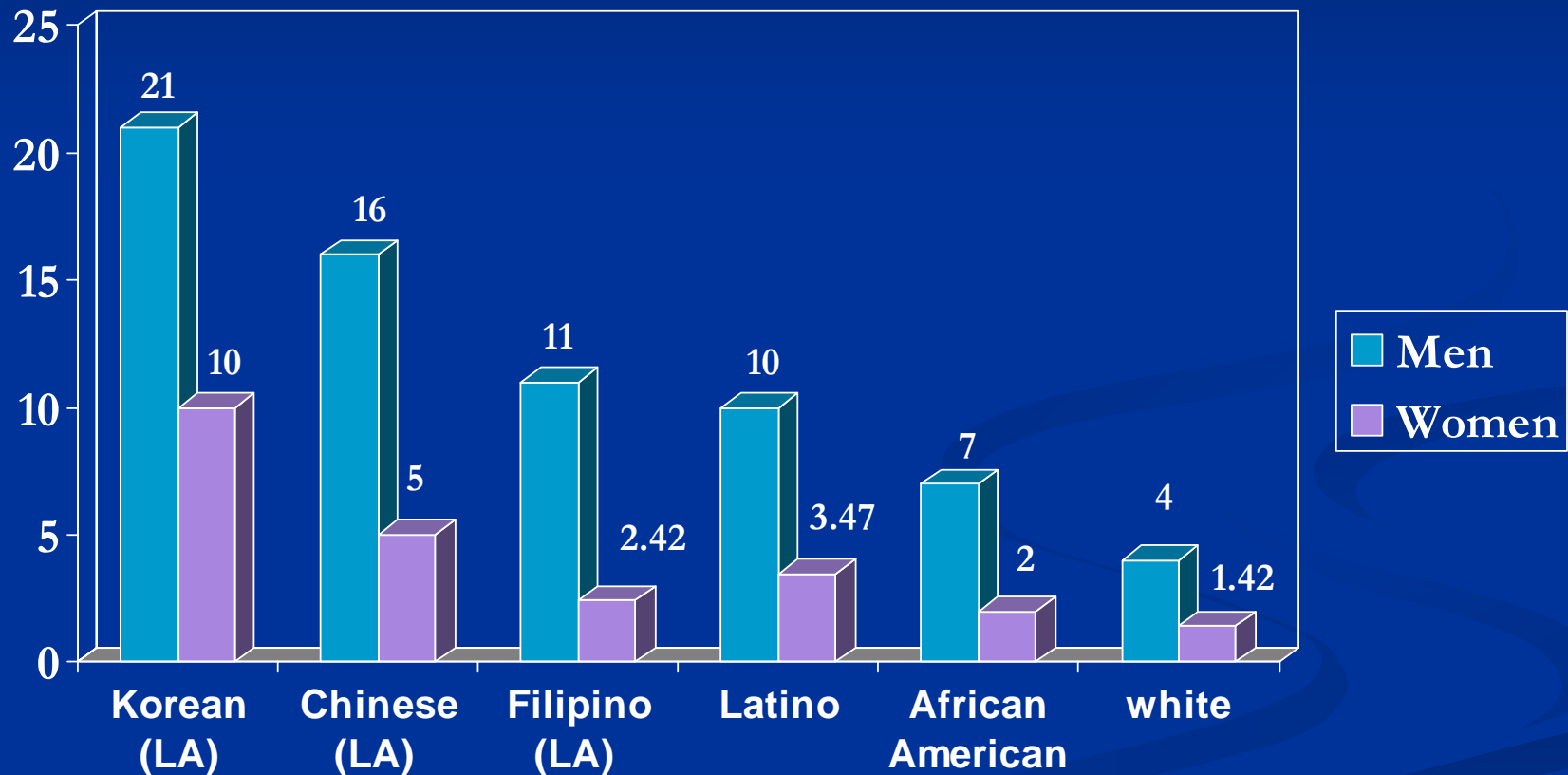
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# IMPACT OF LIVER CANCER

- One of the most common cancers in the world
  - 5<sup>th</sup> most common for men
  - 8<sup>th</sup> most common for women
- Deadly cancer: 5 year survival rate < 10%
- Rates are higher in developing countries
  - Asia
  - Parts of South America and Africa
- Ethnic disparities in liver cancer rates in U.S.

# Liver Cancer Incidence Rates by Ethnicity in the U.S.



Cited in Bosch et al., Primary Liver Cancer: Worldwide Incidence and Trends, *Gastroenterology*, 2004, 125: S5-S16.

# CAUSES OF LIVER CANCER: CONTRIBUTION OF HEPATITIS B & C

- 75-80% of all cases of liver cancer worldwide due to viral hepatitis (Bosch et al., 2005)
  - Hepatitis B (50-55%)
  - Hepatitis C (25-30%)
- Hepatitis B particularly important in some ethnic groups (80% of liver cancer in Asians)
- Other contributions such as obesity may play an increasingly important role over time

# LIVER CANCER RISK FACTORS DIFFER BY GEOGRAPHIC REGION

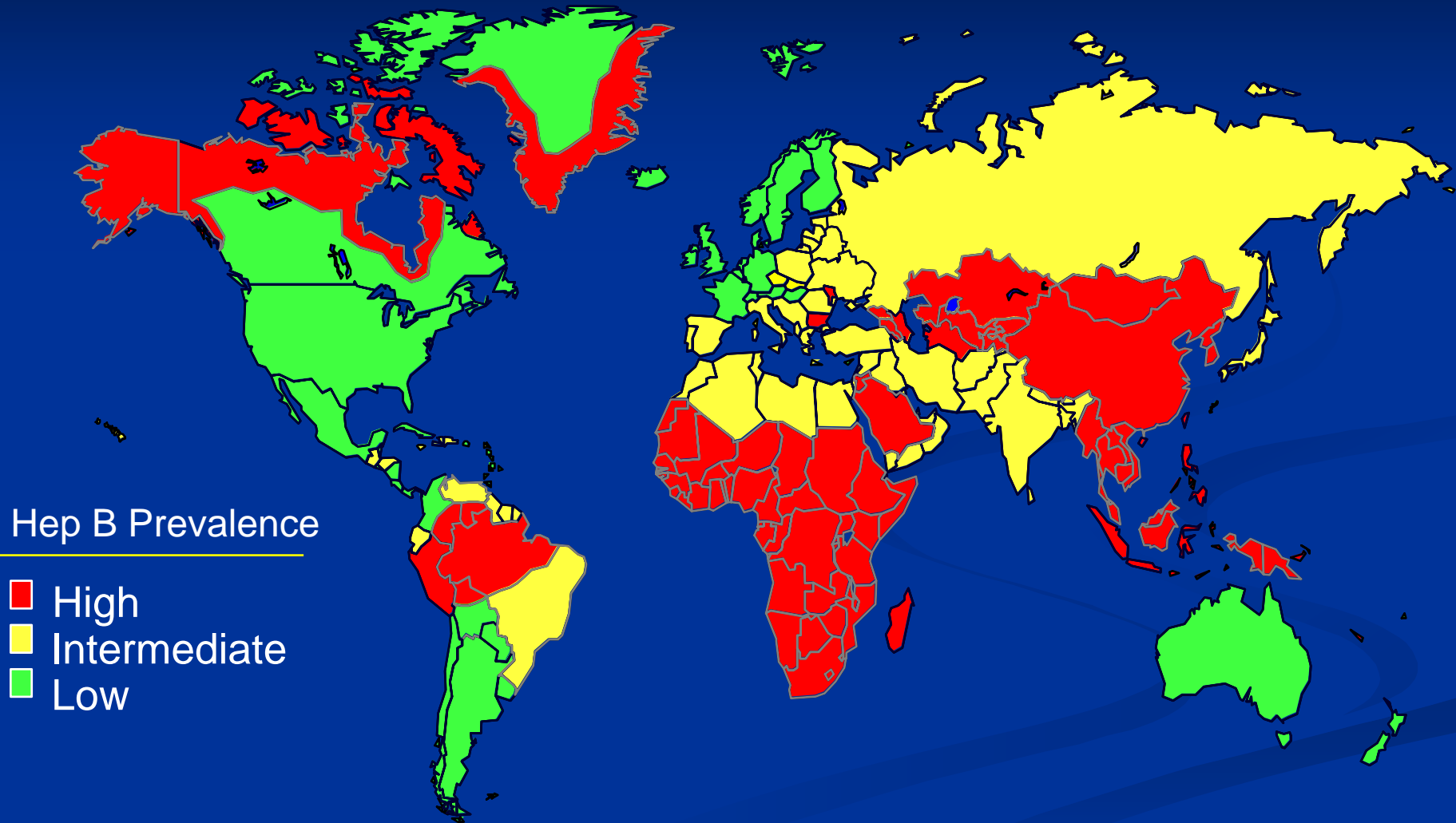
RISK FACTORS	U.S. & Europe	Africa & Asia
	% attributed	% attributed
Hepatitis B	22	60
Hepatitis C	60	20
Alcohol	45	Variable
Tobacco	12	22
Aflatoxin	Limited	Important
Other factors (nutrition, physical activity)	<5	<5

# Other Modifiable Risk Factors

- Liver cancer
  - Obesity, physical activity, diet
  - Alcohol use
  - Tobacco use

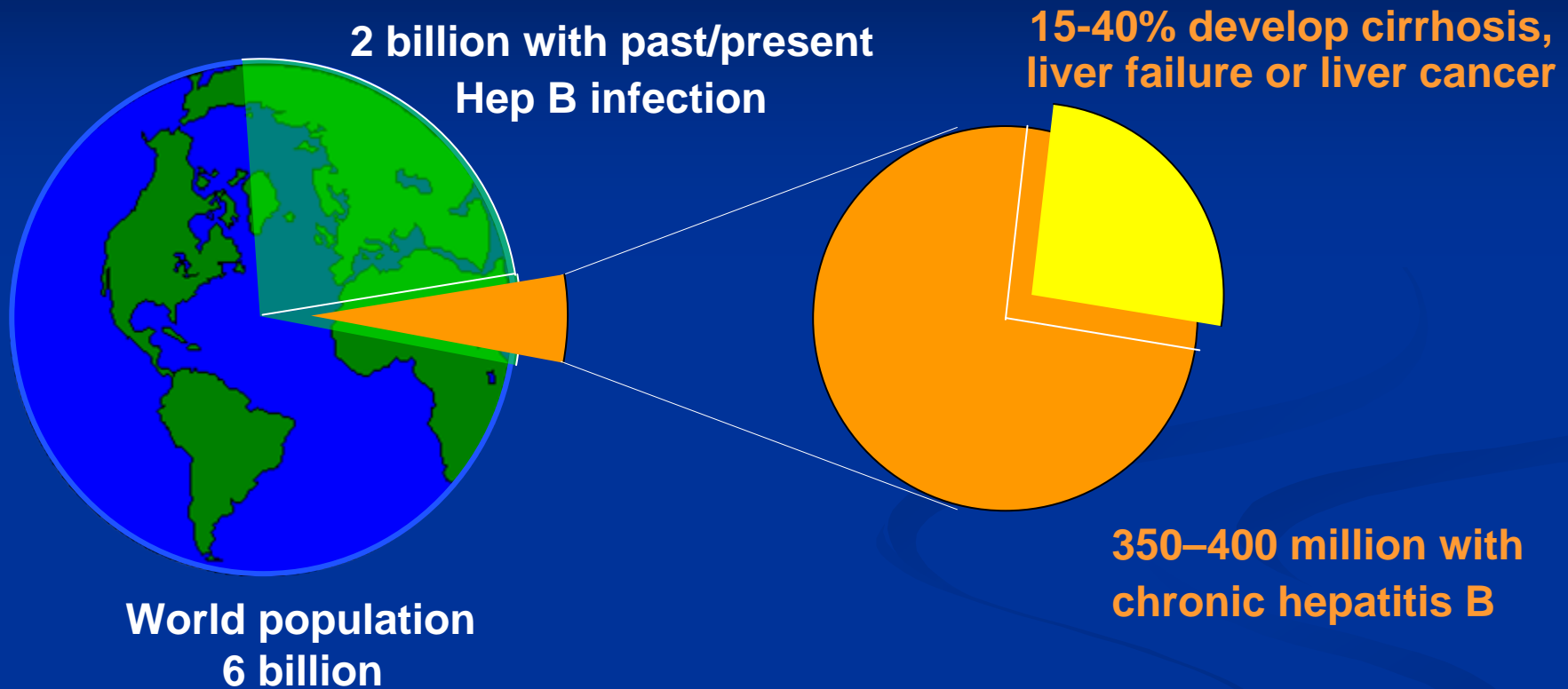


# Geographic Distribution of Chronic Hepatitis B Infection



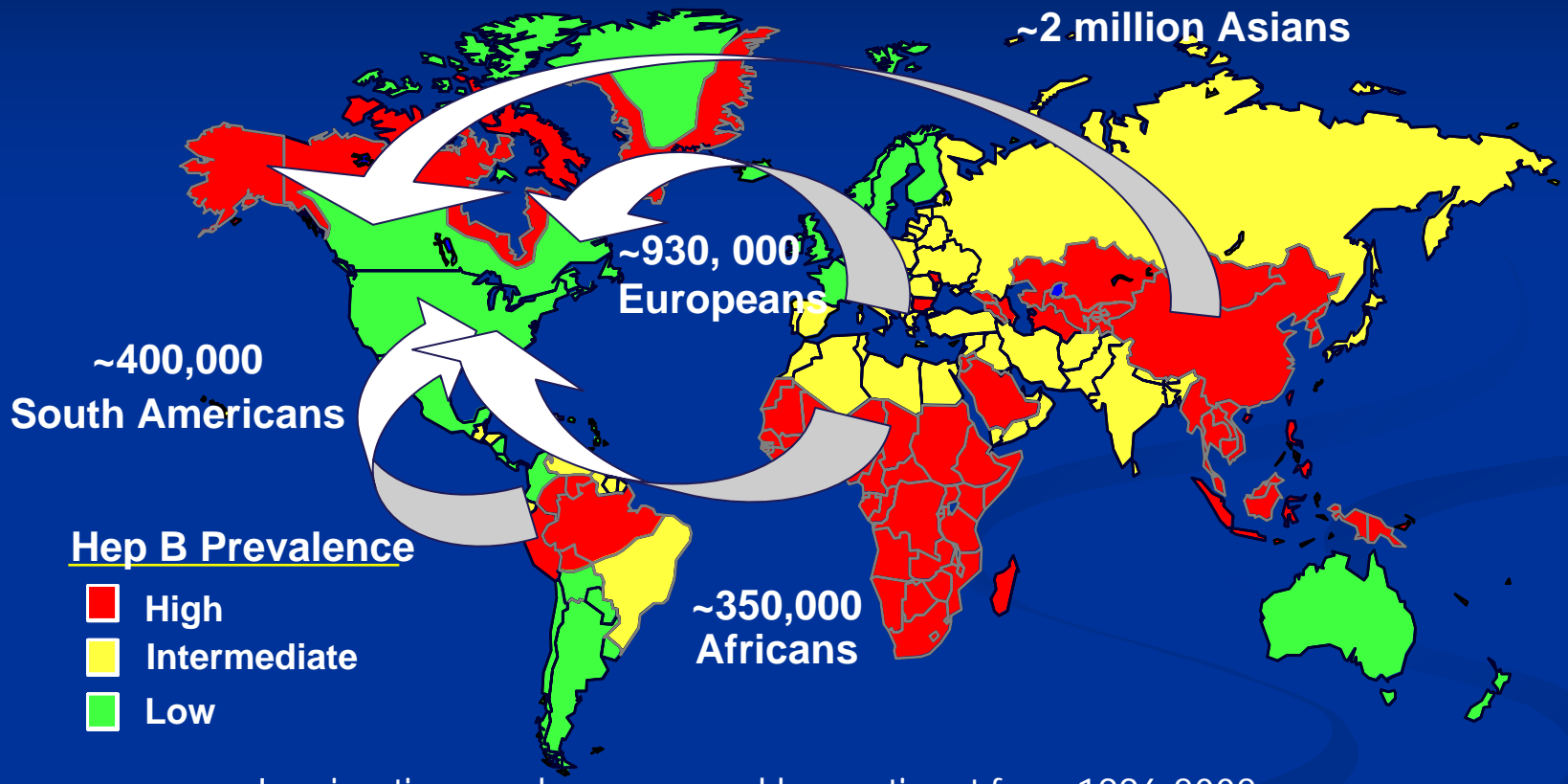
Source: Centers for Disease Control & Prevention

# GLOBAL IMPACT OF HEPATITIS B



**~1 million die per year from Hep B associated liver disease**

# Geographic Prevalence of Chronic Hepatitis B May Be Impacted by Migration



# Strategies to Address Burden of Liver Cancer & Hepatitis B

- Liver Cancer is a vaccine preventable cancer
- Simple blood test can identify those infected
- Effective treatments are now available
- Continued focus on lifestyle factors needed
  - Sexual behavior, household transmission, obesity, tobacco, alcohol