

Viral Hepatitis in Central America and the Caribbean

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Viral Hepatitis in CA and the Caribbean

- Topics to cover:
 - Epidemiology
 - Health Policy
 - Prevention
 - Screening, diagnosis and referral
 - Treatment and monitoring
- Scarce data: most local, regional, national
- Data from WHO and PAHO, a great tool

Response 2012 Global Hepatitis Survey

Box 1. Responses to the 2012 Global Hepatitis Survey: WHO Region of the Americas

Member States that submitted surveys:

- Antigua and Barbuda
- Argentina
- Bahamas
- Barbados
- Brazil
- Canada
- Colombia
- Costa Rica
- Cuba
- Dominican Republic
- Ecuador
- El Salvador
- Grenada
- Guatemala
- Guyana
- Honduras
- Jamaica
- Mexico
- Nicaragua
- Panama
- Paraguay
- Peru
- Saint Kitts and Nevis
- Saint Lucia
- Suriname
- United States of America
- Uruguay

Member States that did not submit surveys:

- Belize
- Bolivia (Plurinational state of)
- Chile
- Dominica
- Haiti
- Saint Vincent and the Grenadines
- Trinidad and Tobago
- Venezuela (Bolivarian Republic of)



Epidemiology

Viral Hepatitis LAC

Epidemiology

HEPATITIS A

119 million infections

31 million symptomatic cases

340,000 deaths/year



Latin America & the Caribbean

- $\geq 50\%$ (naturally) immunized at age 15
Ex. 57% Caribbean & 94% Andean region

- **Hepatitis A**

- Endemicity 57% by the age of 15
- Decreasing due to better sanitation
- Shift the pool from children to young adults
- Decreasing number of adults immune
- Increasing the likelihood of outbreaks

Viral Hepatitis LAC

Epidemiology

HEPATITIS B

2 billion ever infected

240 million actively chronic

500,000-700,000 deaths/year



Latin America & the Caribbean

- Prevalences below 2% to 4%
- All countries have hepatitis B vaccine in their immunization programs

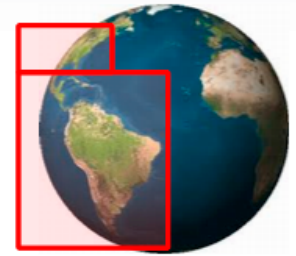
- **Hepatitis B**

- Below 2% in Central America
- 2-4% in the Caribbean
- HBV prevalence decreasing from 1990 to 2005
- Related to the extended use of immunization
- Less than 1 % in Dominican Republic

Viral Hepatitis LAC

Epidemiology

130-170 million chronic
>350,000 deaths/year



**Latin America & the
Caribbean**

7-9 million anti-HCV positive

- **Hepatitis C**

- 7-9 millions in LAC
- Grenada, Haiti, Trinidad & Tobago, El Salvador prevalence > 2.5%
- PR and Dominican Republic
 - Decreasing to < 2%
- Second cause of cirrhosis
- First cause of HCC
- Genotype 1a and 1b represent 70%

Viral Hepatitis LAC

Epidemiology

- **Hepatitis D**

- Data mostly unknown in CA and Caribbean
- 5.2% in hepatitis B
 - Colombia and Amazonia

- **Hepatitis E**

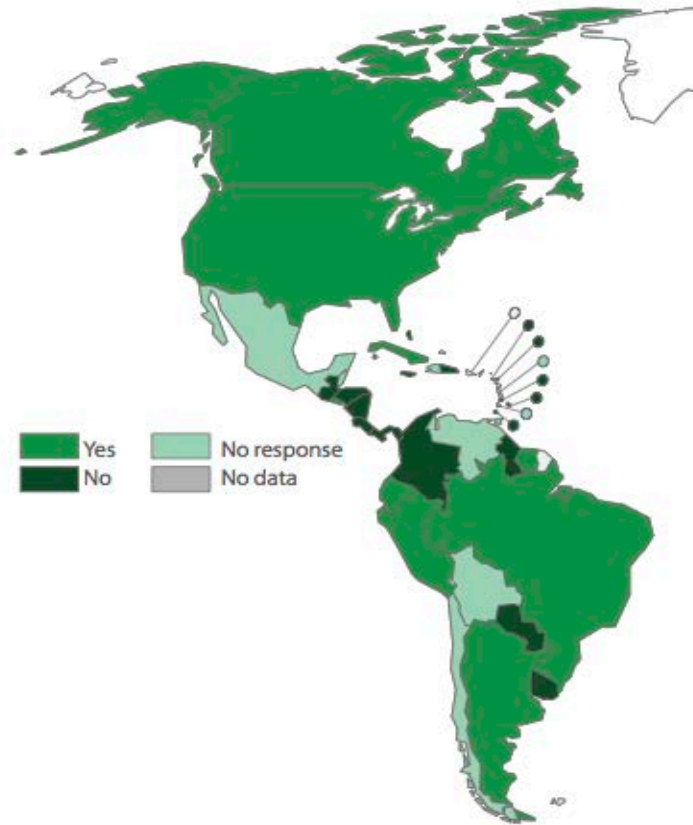
- Data mostly unknown in CA and Caribbean
- Most data from Eastern Europe
- In America: Brazil 3%, Bolivia 1.7-16.2



Policy

National Written Strategy for Prevention and Control of VH

Figure 1. Responses to the question, "Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?"



Hepatitis Prevention Policies, Practices and Guidelines

Table 5. Hepatitis prevention: policies, practices and guidelines (N=27)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national infection control policy for blood banks	77.8	7.4	11.1	3.7
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	96.3	0	0	3.7
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	88.9	0	7.4	3.7
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	14.8	63.0	14.8	7.4
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	59.3	25.9	7.4	7.4

National Clinical Guidelines for Management of VH

Figure 4. Responses to the question, "Are there national clinical guidelines for the management of viral hepatitis?" (N=27)

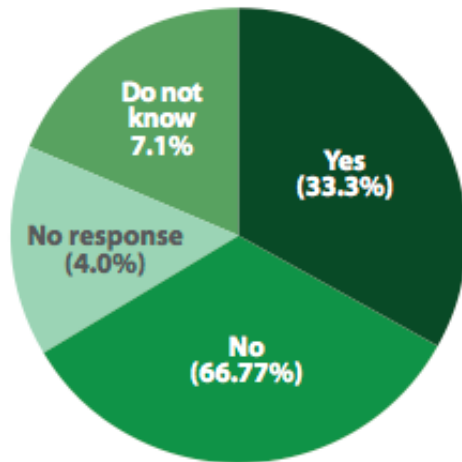
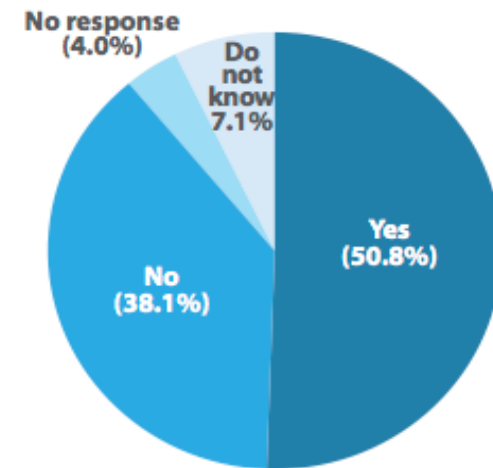


Figure 5. Responses to the question, "Are there national clinical guidelines for the management of viral hepatitis?" (N=126)



^a N=26 (This response option was not included in the survey completed by Colombia.)

Government Goal of Eliminating Hepatitis B

Figure 2. Responses to the question, "Has your government established the goal of eliminating hepatitis B?" (N=27)

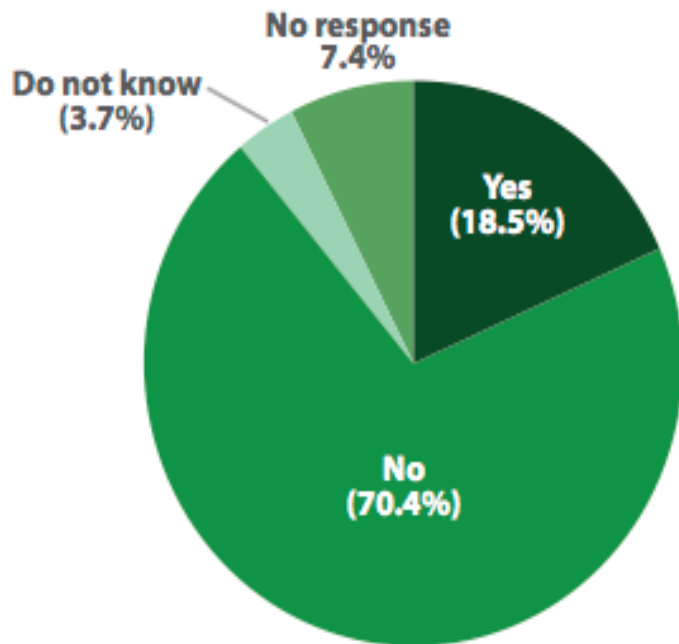
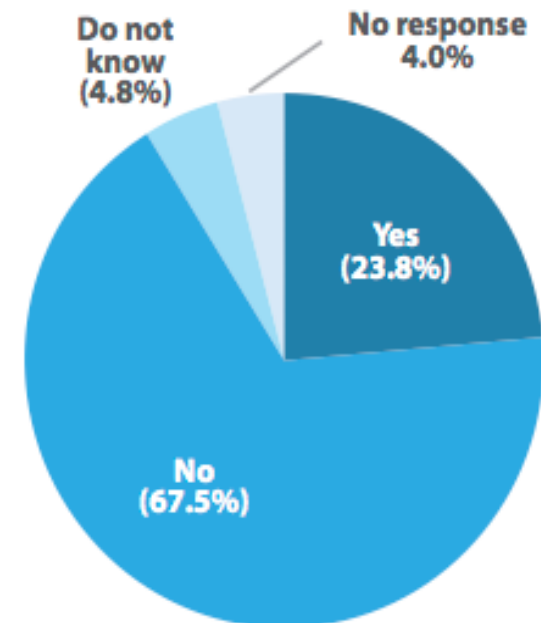


Figure 3. Responses to the question, "Has your government established the goal of eliminating hepatitis B?" (N=12)





Prevention

Viral Hepatitis

Prevention

- Vaccine
 - HBV included in vaccination schedules since 2012
 - Decreased 70% prevalence of infection in vaccinated
 - Neonatal dose HBV vaccine in 13 countries
 - HA vaccine has been incorporated by Panama
- Blood Bank
 - 99% of donated blood: screened for hepatitis B & C
 - Half million deferred from donation due to RF
 - 78,000 units positive for these virus
 - Promoting voluntary donation programs

National Policy for Preventing Mother Transmission of Hepatitis B

Table 4. Activities called for in national policy targeting mother-to-child transmission of hepatitis B (N=19)

	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Antigua and Barbuda	X	X	X	X	X
Argentina	X	X	X	X	X
Bahamas	X	X	X	X	
Brazil				X	X
Canada	X	X		X	X
Colombia	X	X	X	X	X
Costa Rica	X	X	X	X	X
Cuba	X	X	X	X	X
Ecuador	X			X	X
Grenada	X	X	X	X	X
Guatemala					X
Guyana	X	X	X		
Honduras		X	X	X	X
Jamaica		X	X	X	X
Panama					X
Peru					X
Suriname	X	X	X	X	X
United States of America	X	X		X	X
Uruguay	X	X	X	X	X
TOTAL	13	14	12	15	17

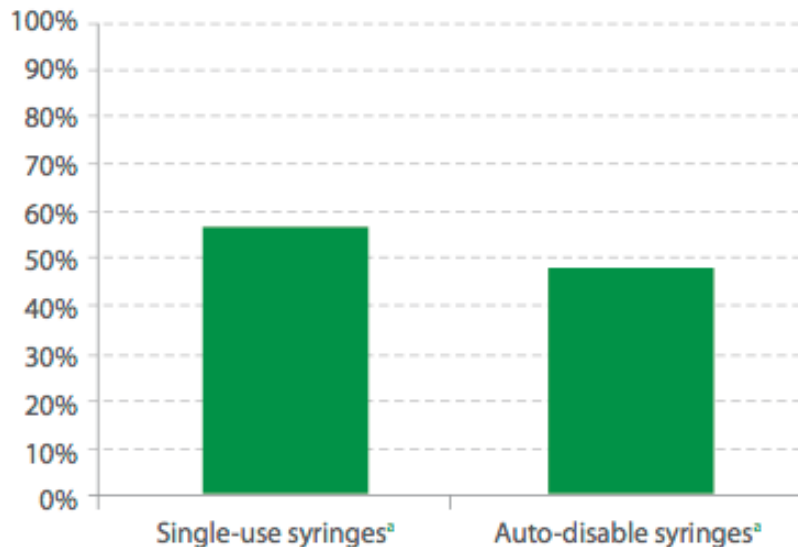
Viral Hepatitis

Prevention/HCW/HCF

- Health care workers
 - Hepatitis C: 55% from needle stick
 - Hepatitis B: 65-80% from needle stick
- Prevention work related accidents
 - Guidelines on unnecessary injections
 - Promotions of safe injections practices in HCF
 - Immunizations campaigns in HCW
- Evidence of health care related infection still observed

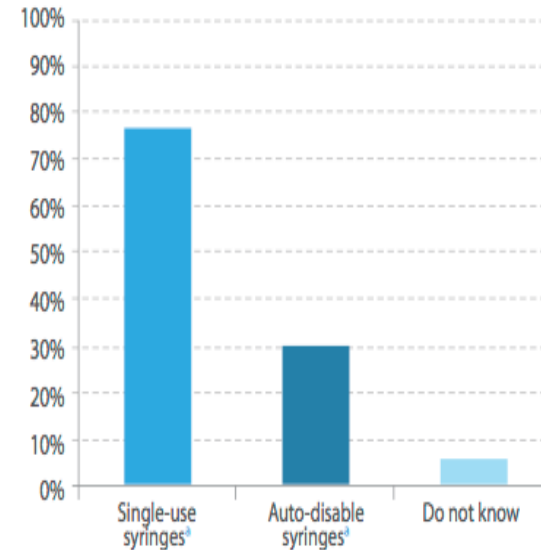
Policy for Injection Safety HCW

Figure 3. Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=23)



^a Respondents could select both "single-use syringes" and "auto-disable syringes".

Figure 4. Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=109)



^a Respondents could select both "single-use syringes" and "auto-disable syringes".

Viral Hepatitis Prevention

- IVDA
 - Not a significant problem in CA and the Caribbean
 - Except for Puerto Rico
 - 89% IVDA are Hepatitis C positive
 - 17% IVDA are HIV + (95% co-infected Hep C)
 - More frequent injection
 - More needle sharing
 - Less sterile syringes programs
- Urgent need for needle exchange programs and drug treatment programs

Viral Hepatitis

Prevention for Hepatitis A & E

- Fecal/Oral transmission
- Water sanitation and food safety essential
- Improved in most countries, still more needed
- No specific and integrated actions
- Education: how to prevent hepatitis A & E
- No vaccination program for hepatitis A except for Panama

Viral Hepatitis

Awareness Campaigns

- Few government funded or promoted VH awareness campaigns
 - Contributions between medical society, pharmaceutical industry, patient advocacy groups in public awareness campaigns
- Viral hepatitis day, celebrated since 2010
 - Officially endorsed by government: 40% country



Screening

Viral Hepatitis

Screening & Diagnosis

- 80% Report surveillance program for Acute hepatitis B
- Much less for Chronic hepatitis B and C
- 46% country offer free testing for hepatitis B
- 26% free testing for hepatitis C, HRG
- Testing for B and C mandatory in HRG, 15%
- No screening policy for hepatitis A, D, E
- Blood service plays a mayor role
- In DR, Hepatitis B and C are tested outside of blood bank
 - Employment applications
 - Before most medical procedures
 - Pregnant women
 - Pre-marriage tests

Viral Hepatitis

Referrals

- Positive patients should be referred to health services
 - Counseling
 - Assistance
 - Diagnosis
 - Treatment
 - Monitoring
- Less than half of the countries have a referral policy for B and a third for hepatitis C



Treatment

Drugs for Hepatitis B & C Subsidized by Governments

Table 6. Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=12)
Lamivudine	59.3
Interferon alpha	59.3
Tenofovir	40.7
Pegylated interferon	33.3
Entecavir	22.2
Adefovir dipivoxil	18.5
Telbivudine	11.1
Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=12)
Ribavirin	37.0
Pegylated interferon	37.0
Interferon alpha	25.9
Telaprevir	11.1
Boceprevir	7.4

Viral Hepatitis

Treatment

- Failure in treatment for Hepatitis C
 - Underestimation
 - Prevalence
 - Need for treatment
 - Human and economic burden of disease
 - Rapid evolution of therapy
 - Elevated costs
 - No doubt of cost effectiveness for both B & C
 - Remains the mayor barrier for Tx

Viral Hepatitis in CA and the Caribbean

Summary/Recommendations

- Progress has been made against VH
- Required: A Universal compatible and validated system for data collection and surveillance

Viral Hepatitis in CA and the Caribbean

Summary/Recommendations

- Prevention
 - Maintain vigilance for Hepatitis B and C in blood banks
 - **Establish a referral system**
 - Broad screening programs outside blood banks
 - HCW/HCF
 - Maintain and strengthen safety practices in the work places
 - **Indigenous people**
 - Improve sanitary conditions
 - Water sanitation
 - Food safety programs

Viral Hepatitis in CA and the Caribbean

Summary/Recommendations

- **Viral Hepatitis awareness campaign**
 - Increased interest of VH in health policy makers
 - Increase efforts and resources invested in preventing, diagnosis, treatment and monitoring
 - Promote World Hepatitis Day



Viral Hepatitis in CA and the Caribbean

Summary/Recommendations

- Cost of therapy is the biggest barrier
- Need quantified cost of complications from VH
- Treatment means:
 - Patients back to society
 - Decreases costs of complication
 - Reduction of the burden to society
 - Limit virus transmission
- Must establish agreements between
 - Government
 - Pharmaceutical Industry
 - Medical Societies
 - For cost reduction
- **GOAL: Universal access to treatment**



“Incomplete scientific evidence does not confer upon us the freedom to ignore the knowledge we already have, or to postpone the action that it appears to demand”

Sir Austin Bradford Hill



Muito Obrigado Pela Sua Atencao