

**5<sup>th</sup> HEPATITIS C**  
TECHNICAL ADVISORY  
GROUP  
**TAG Meeting**

# **PREVALENCE OF HEPATITIS B AND ASSOCIATED RISK FACTORS**

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# Rationale

- Limited data on HBV and HCV prevalence and associated risk factors

# Survey objectives

## ■ Primary Objectives

- Calculate HCV & HBV prevalence in Georgia
  - Nation-wide
  - In 6 major cities (including Tbilisi)
  - Several specific geographical regions
  - Urban vs. rural
- Determine risk factors

## ■ Secondary Objectives

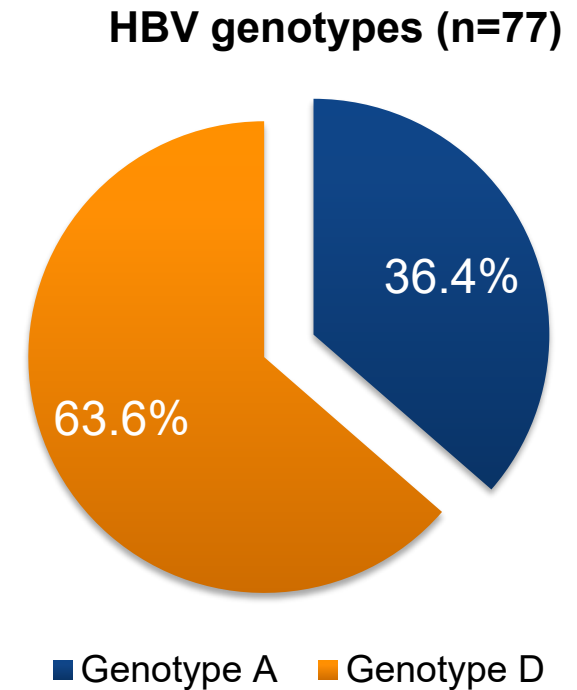
- Update 2010 WHO data on prevalence of risk factors for non-communicable diseases (NCDs) – hypertension, obesity, smoking, alcohol misuse, physical activity

# Methods

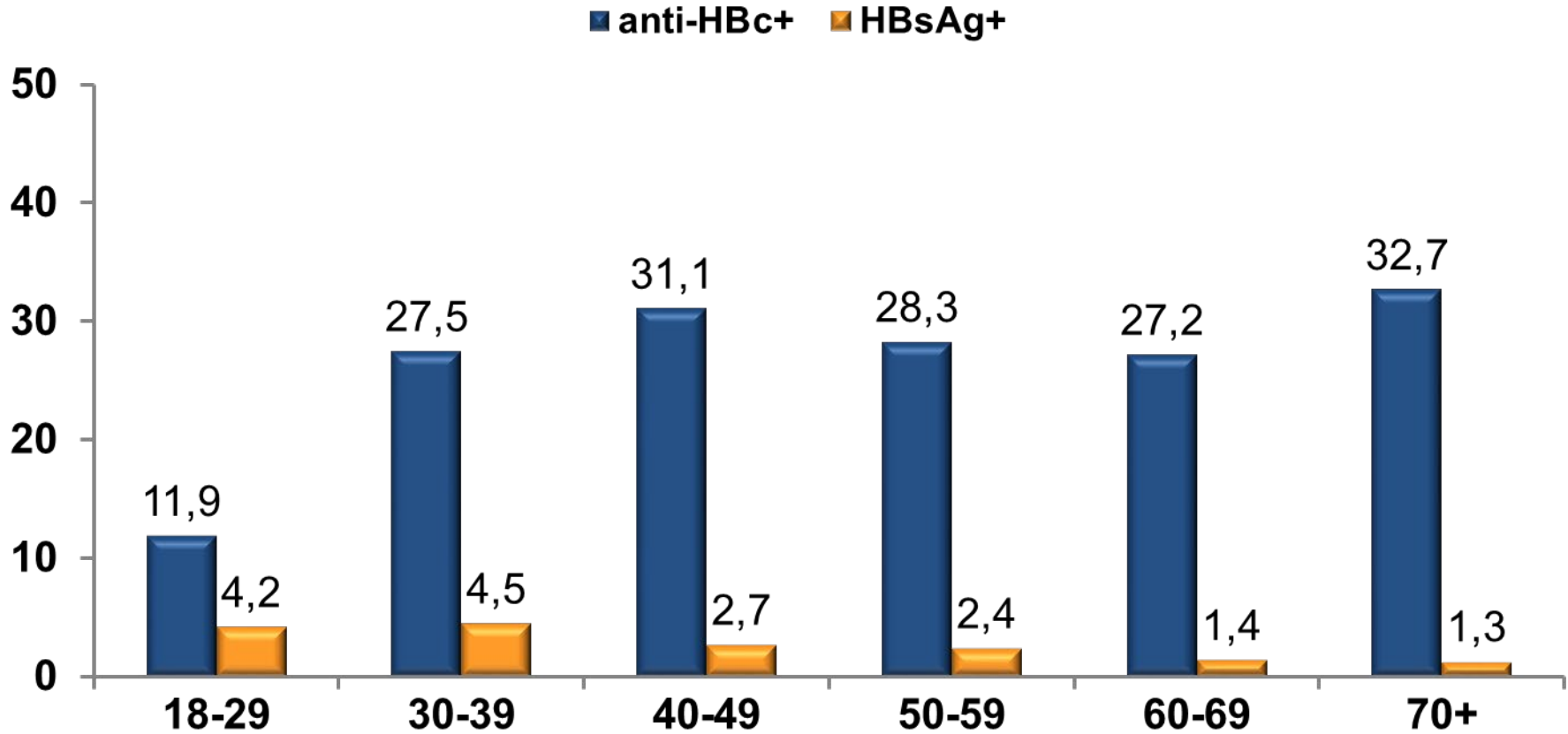
- Sample chosen using a stratified, multi-stage cluster design with systematic sampling
- Sample: 7,000 adults,  $\geq 18$  years of age
- Among participants who consented, together with risk factors, knowledge about hepatitis B virus (HBV) infection was collected.

# HBV prevalence

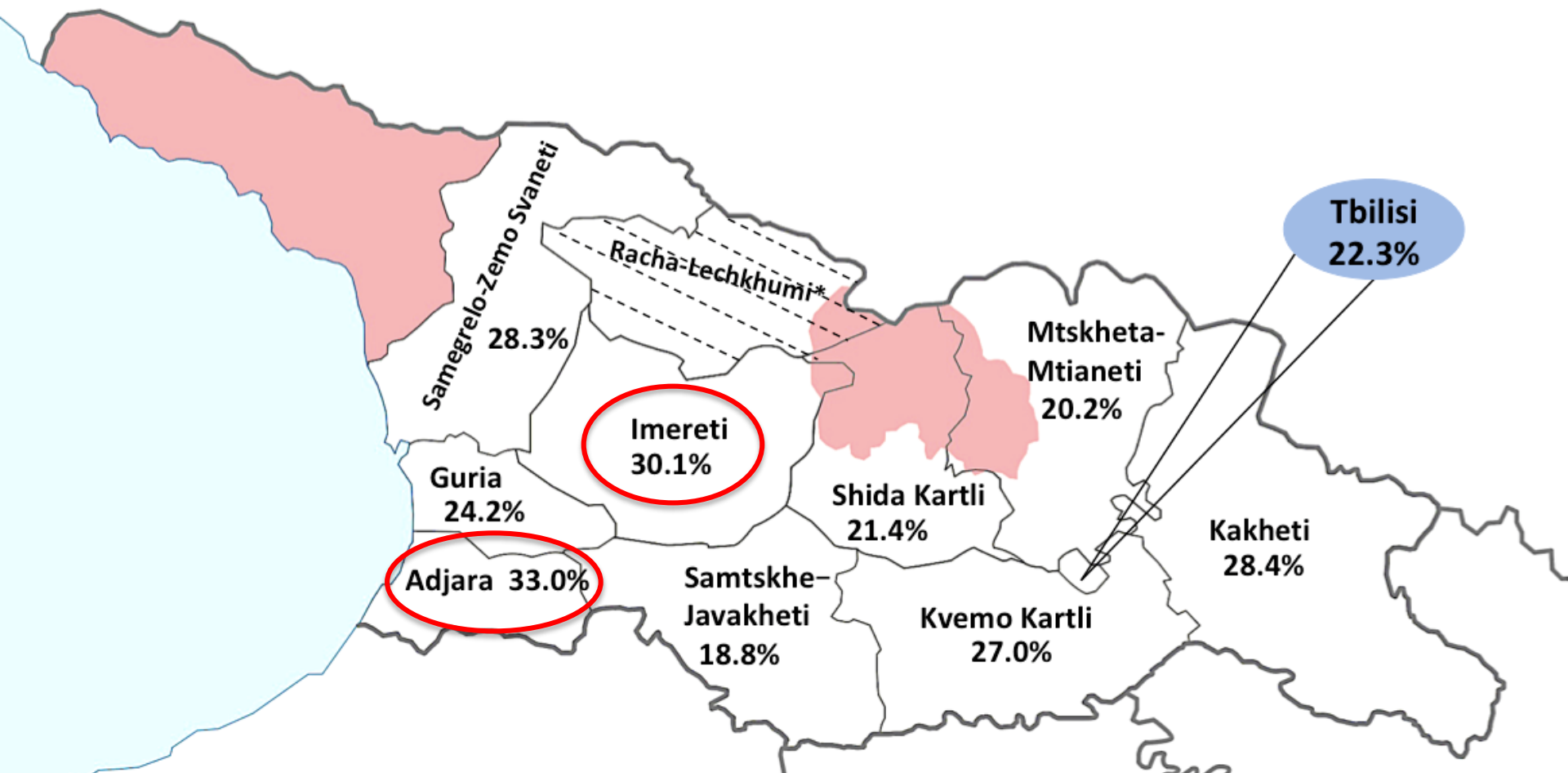
Overall	%	95% CI
Anti-HBc+	25.9	24.2 - 27.6
HBsAg+	2.9	2.4 - 3.5
Anti-HBc+ & HCV antibody+	12.9	10.2 - 15.5
HBsAg+ & anti-HCV+	13.3	5.8 - 20.8
HBsAg+ & HDV	0.9	0.0 - 2.0



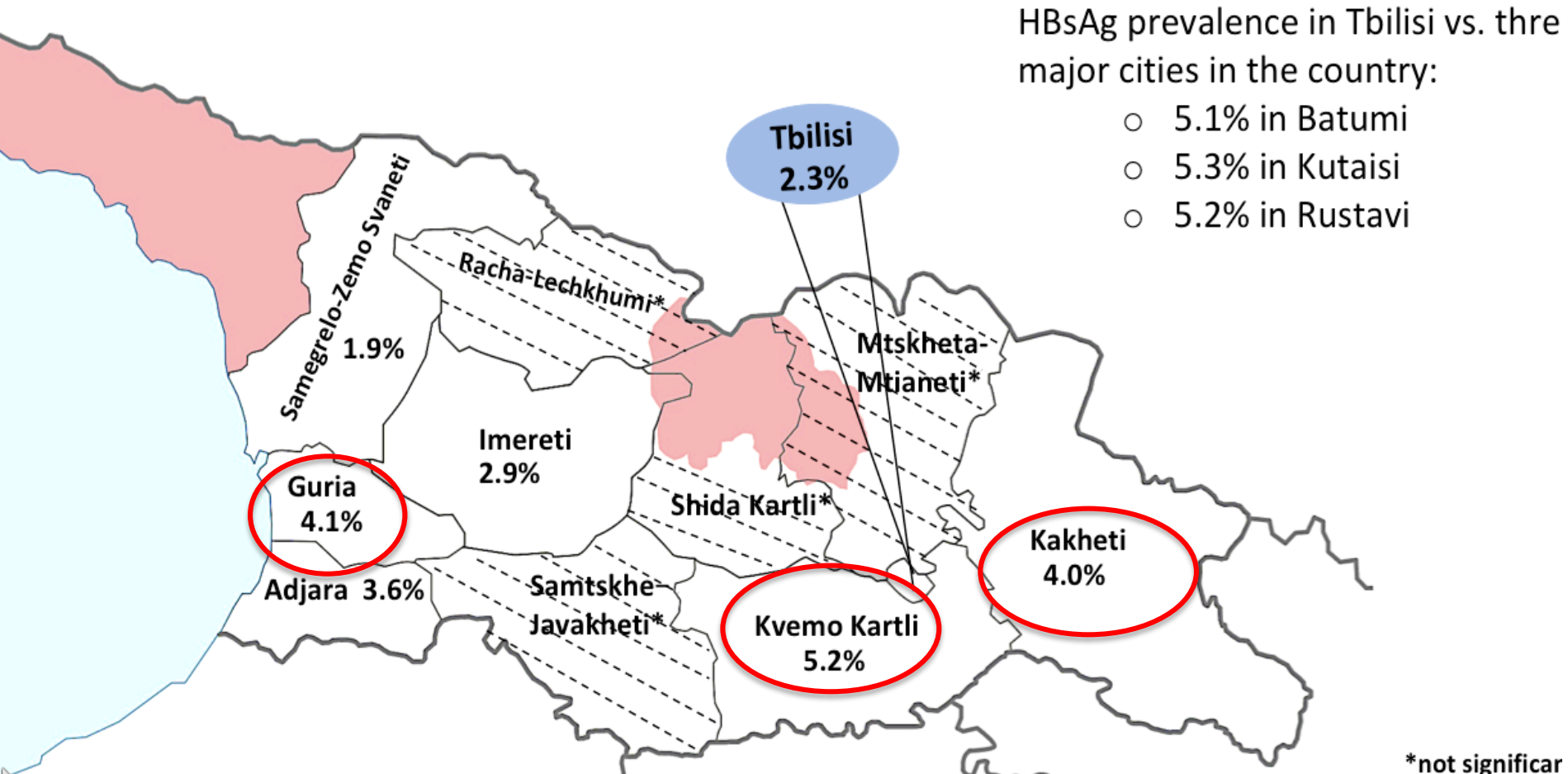
# HBV prevalence by age-groups



# Distribution of anti-HBc by regions



# Distribution of HBsAg by regions



\*not significant



# Associated risk factors

Characteristic (anti-HBc+)	OR	95%CI
Ever injecting drugs	2.46	1.64 - 3.69
Ever having a blood transfusion	1.67	1.32 - 2.11
Ever having sex with a commercial sex worker	1.46	1.07 - 2.00
Characteristic (HBsAg)	OR	95%CI
Ever having a blood transfusion	2.72	1.54 - 4.80
Incarceration	2.72	1.25 - 5.93

*\*Ever injecting drugs was not associated with being HBsAg positive.*

# HBV knowledge

- Only 36.7% has ever heard of HBV
- Transmission:
  - Blood 23.3%
  - Sharing needles or syringes 20.6%
  - Sharing household objects like razors 18.7%
- Out of those who had heard of HBV, 42.8% were aware that it could be treated
- 42.5% knew that it could be asymptomatic

# Limitations

- Cross-sectional design – limited ability to draw causal associations
- Self-reported risk factor data
- Only included persons  $\geq 18$  years of age, so hepatitis B prevalence could not be estimated in younger age groups

# Conclusions

- Prevalence is high to moderate compared to EURO region
- Young adults (18-39), were most affected by HBV infection (4.5%)
- Blood transfusion, IDU, having sex with the commercial sex workers, and incarceration were the risk factors associated with HBV infection exposure
- Prevalence of HBV varies by region
- Efforts should be focused on raising awareness about HBV infection and its associated risks among general population



*Thank you*