4<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

 $\diamond\,$  Calculate HCV & HBV prevalence in Georgia

- Nation-wide
- In 6 major cities (including Tbilisi)
- Several specific geographical regions
- Urban vs. rural

 $\diamond$  Determine risk factors

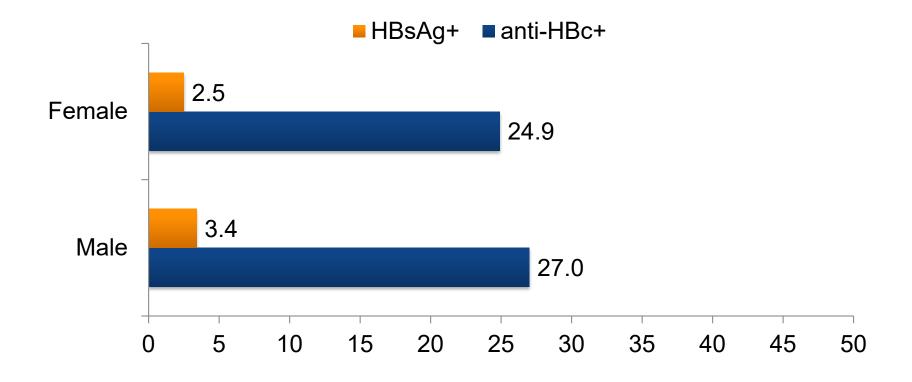
- Secondary Objectives
  - ♦ Update 2010 WHO data on prevalence of risk factors for non-communicable diseases (NCDs) – hypertension, obesity, smoking, alcohol misuse, physical activity

## **Methods**

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

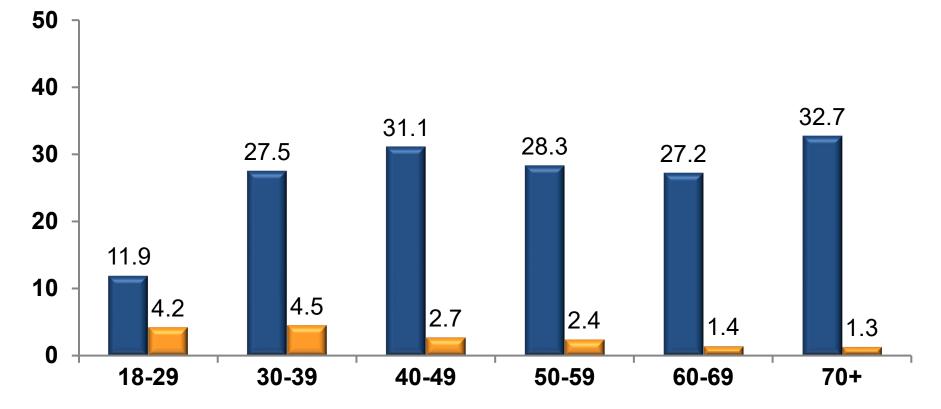
### **HBV** prevalence

Overall	%	n	95% CI
Anti-HBc+	25.9	1634	24.2 - 27.6
HBsAg+	2.9	188	2.4 - 3.5

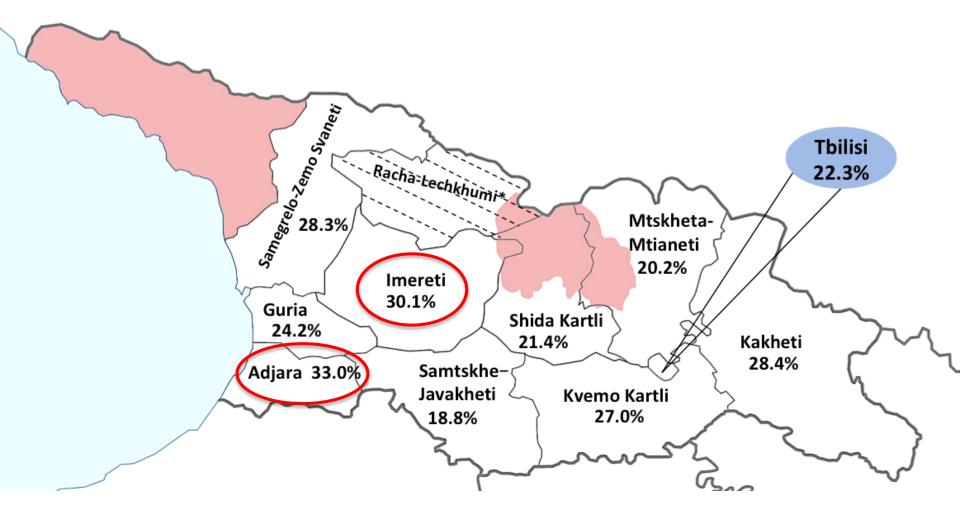


### **HBV** prevalence by age-groups

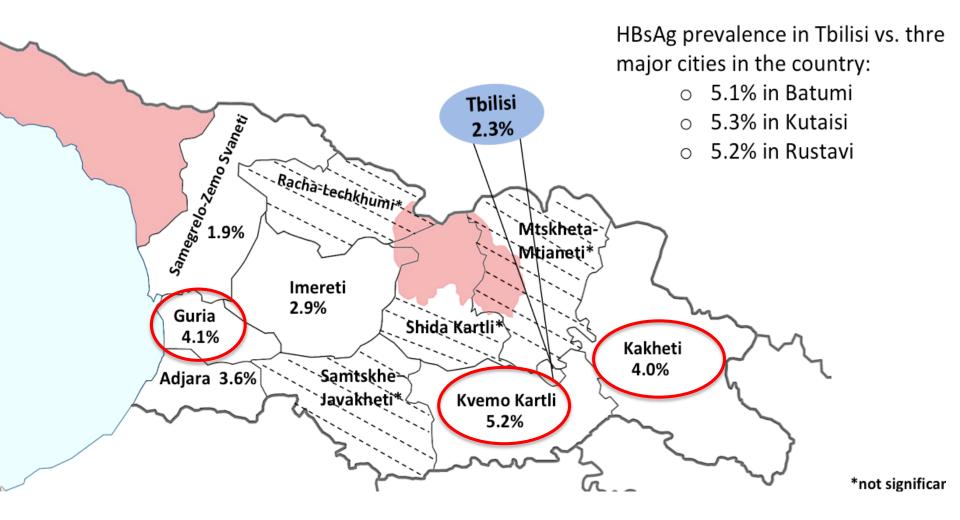
anti-HBc+ HBsAg+



#### **Distribution of anti-HBc by regions**



### **Distribution of HBsAg by regions**



### **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; AND
- 42.5% knew that it could be asymptomatic.

## Limitations

- Cross-sectional design limited ability to draw causal associations;
- Self-reported risk factor data;
- Not a nationally representative PWID study underreporting due to IDU criminalization;

### Conclusions

- Prevalence is relatively high compared to EURO region, where it varies within 1%;
- 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;
- Prevalence of HBV vary by region;
- Efforts should be focused on raising awareness about HBV infection and its associated risks among general population.

# Acknowledgements

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Centers for Disease Control and Prevention (CDC)



National Statistics Office of Georgia



Survey Team