



**Tervise Arengu Instituut**  
National Institute for Health Development

# **Viral hepatitis surveillance in special risk groups in Estonia**

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**Viral Hepatitis Prevention Board meeting**

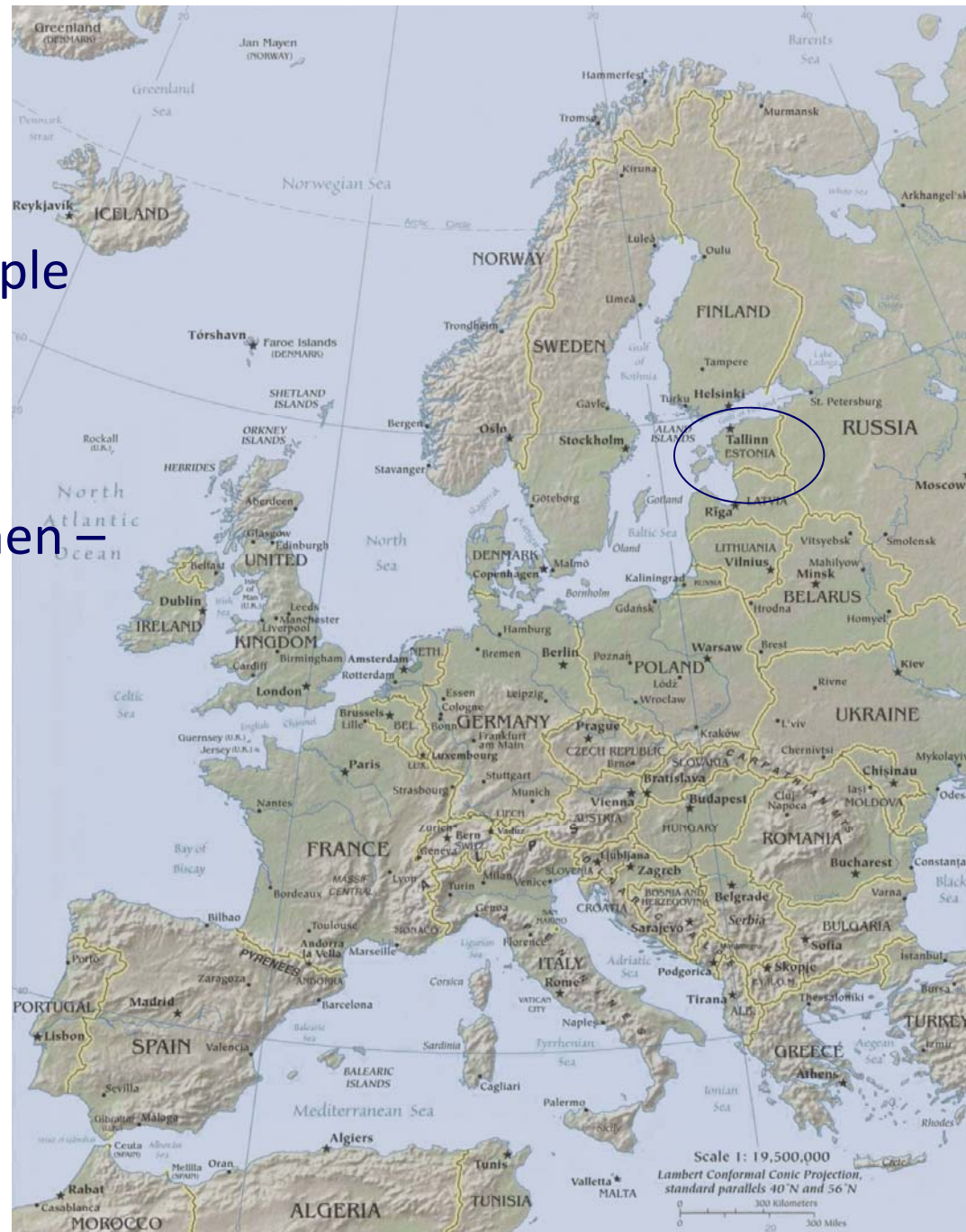
## Republic of Estonia:

Population – 1.3 million people

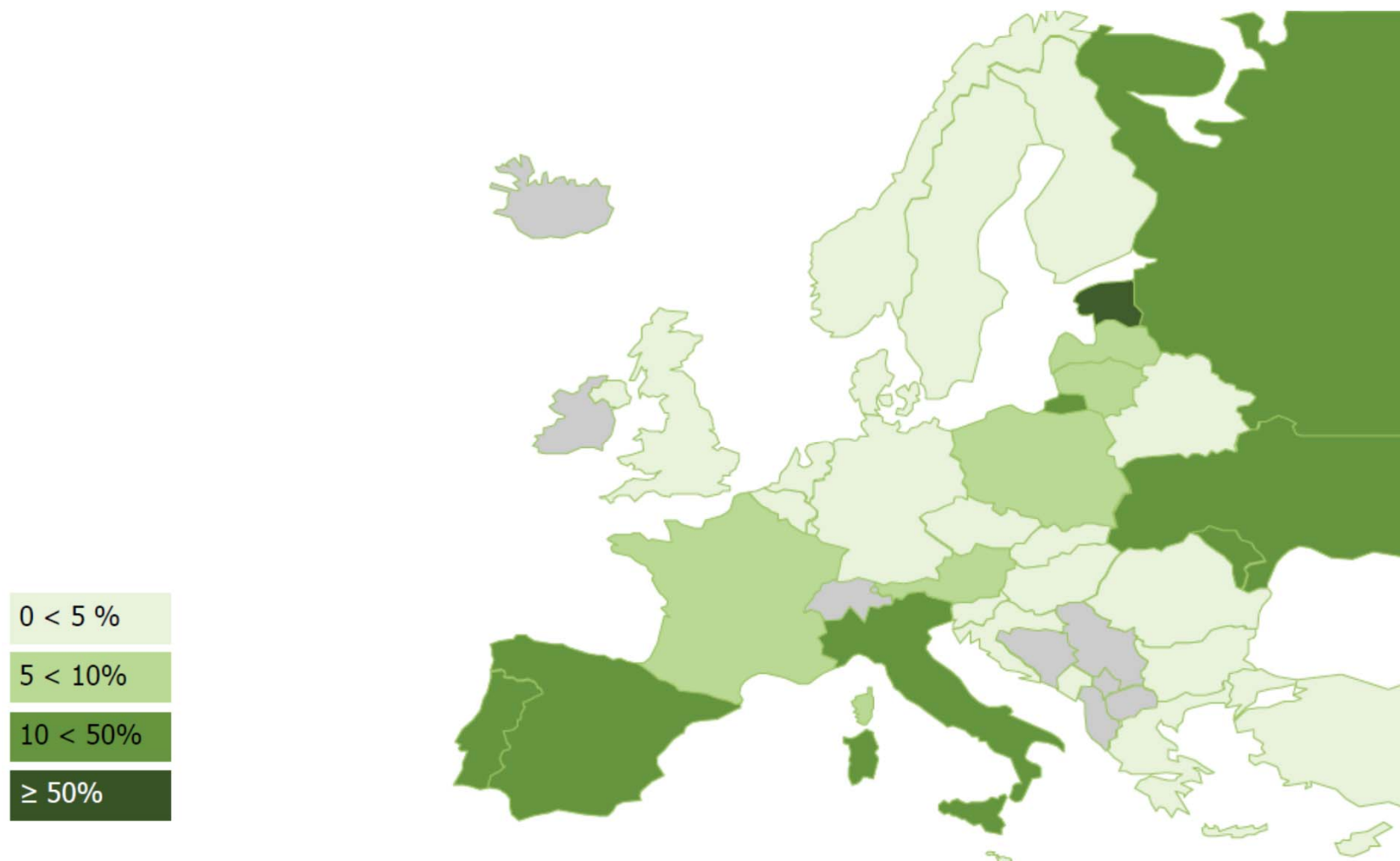
- People who inject drugs – approx 9,000 people
- Men who have sex with men – approx 9,000 people
- Sex workers – approx 600

## 2014:

- Acute HBV 0.6/100,000
- Acute HCV 1.6/100,000
- HIV 22.6/100,000

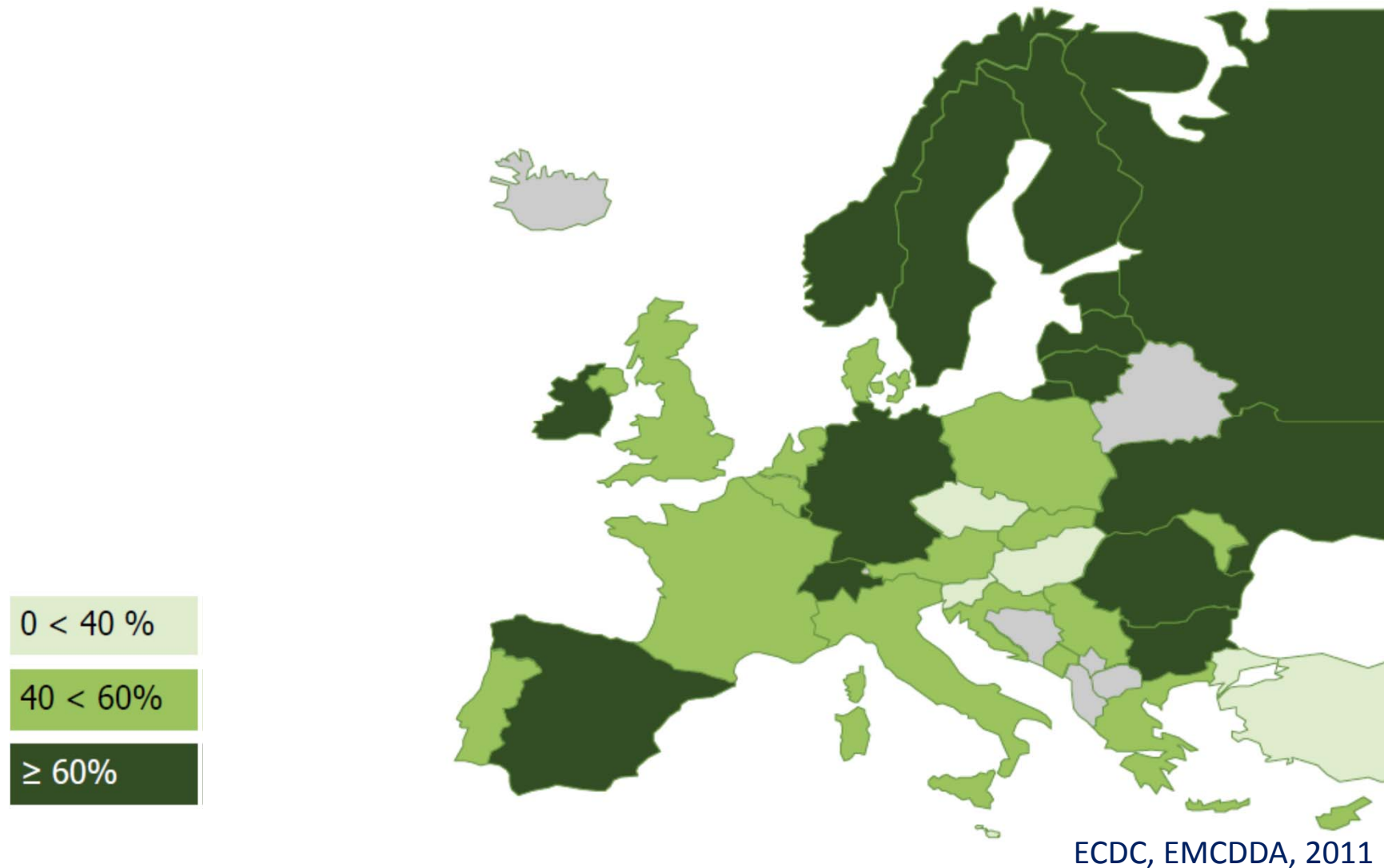


## HIV prevalence among IDUs in Europe, 2008–2009



ECDC, EMCDDA, 2011

## Prevalence on HCV antibodies among IDUs in Europe, 2008–2009



# People who inject drugs I

- Viral hepatitis surveillance in the framework of HIV surveillance , in collaboration with Tartu University, department of public health
- Routine cross-sectional studies (respondent driven sampling) in three regions:
  - ✓ Capital city Tallinn 2005, 2007, 2009, 2011, 2013.
  - ✓ Narva, North-Eastern Estonia 2010, 2014.
  - ✓ Kohtla-Järve, North-Eastern Estonia 2005, 2007, 2012.
- Sample size 350, interviewer administered questionnaire and blood sample collection

## People who inject drugs II

	Tallinn		Kohtla-Järve		Narva	
	2007	2013	2007	2012	2010	2014
<b>HIV prevalence (Ab+Ag)</b>	55%	58%	69%	62%	52%	48%
<b>HCV Ab prevalence</b>	94%	90%	76%	75%	76%	61%
<b>HBsAg prevalence</b>	5%	4%	2%	4%	6%	22%
<b>Anti-HBc prevalence</b>	77%	—	73%	73%	—	64%

# PWID, Kohtla-Järve

	2007 (n=350)		2012 (n=599)	
	N	%	N	%
HIV Ag+AB	243	69,4	369	61,6
HCV AB	289	82,6	447	74,6
HBsAg	6	1,7	25	4,2
anti-HBc IgG			435	72,6
HBs-IgG			174	29,0
HAV-IgG/IgM			277	46,2

Tartu University and NIHD, unpublished data

# Sex workers

- Viral hepatitis surveillance in the framework of HIV surveillance
- Routine cross-sectional studies (convenience sampling) in capital city Tallinn

2011 data	%
HIV-1/2 antibodies	5,8
HCV antibodies	6,7
HBV antibodies	1,6



# Men who have sex with men

- Viral hepatitis surveillance in the framework of HIV surveillance
- Internet-based and RDS recruitment, mostly in capital city Tallinn

2013 data	%
HIV-1/2 antibodies	7.0
HCV antibodies	4.7
HBsAg	0
HAV antibodies	39.5

# Challenges

- Viral hepatitis is not the priority, surveillance is conducted in the framework of HIV activities
- Limited and irregular financing of the studies
- Sampling issues (e.g RDS does not work among SW and MSM) → small sample size, not representative data