Overview of HAV, HBV and HCV surveillance systems and results in Lithuania

IRMA Čaplinskienė

Head of HIV/AIDS/STI and Hepatitis Surveillance, Centre for Communicable Diseases and AIDS;

National ECDC contact for hepatitis /STI/ HIV; Member of the ECDC hepatitis B and C network;

Member of the International AIDS Society Scientific Board

SAULIUS Čaplinskas

Director, Centre for Communicable Diseases and AIDS;

Professor Mykolas Romeris university, Vilnius

saulius@ulac.lt

irma@ulac.lt

VIRAL HEPATITIS PREVENTION BOARD MEETING

RIGA, LATVIA, 19-20 NOVEMBER 2015

PREVENTION AND CONTROL OF VIRAL HEPATITIS IN THE BALTIC STATES: LESSONS LEARN AND THE WAY FORWARD

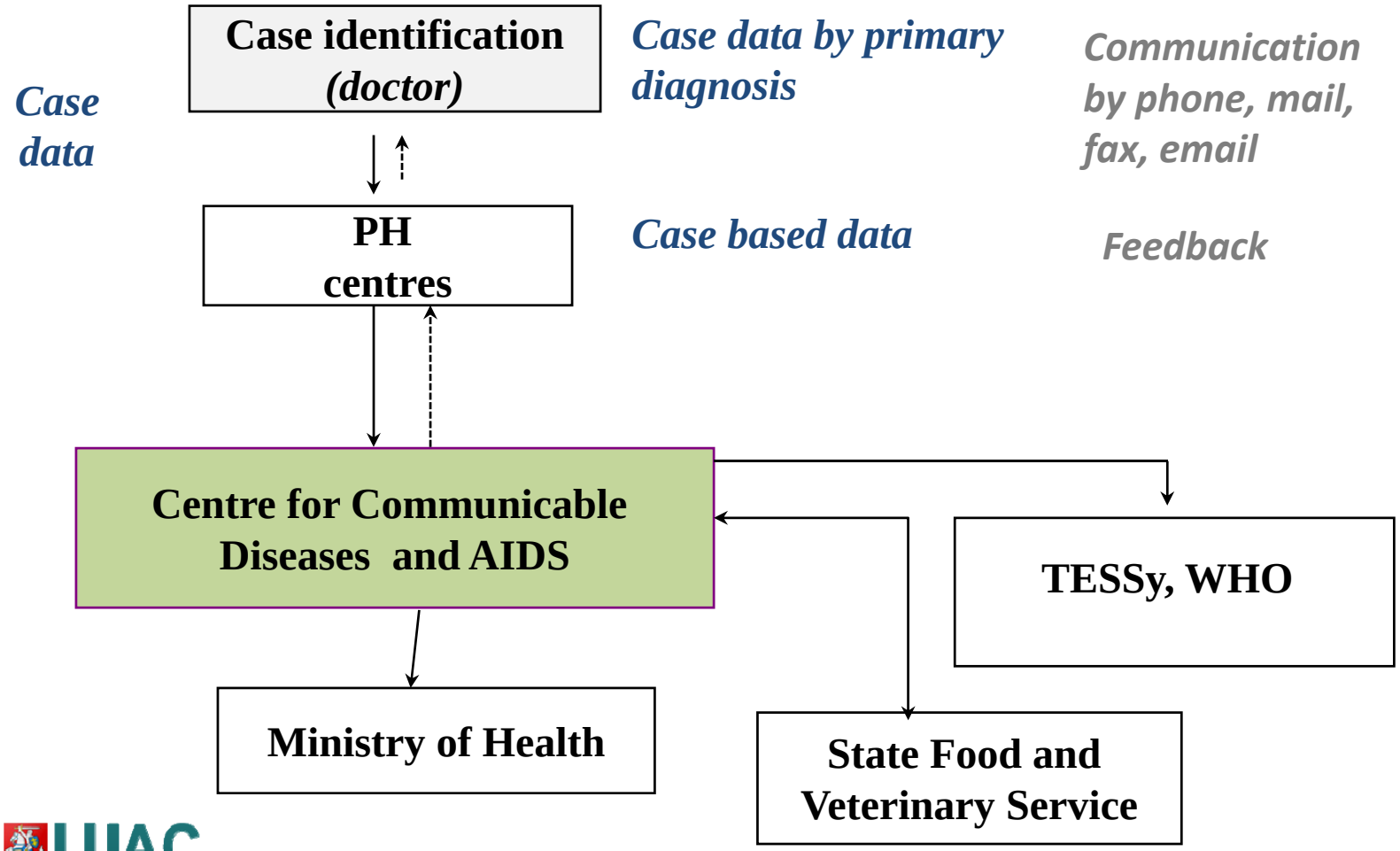
ULAC

Centre for Communicable Diseases and AIDS

Incidence data – LR Legal Acts

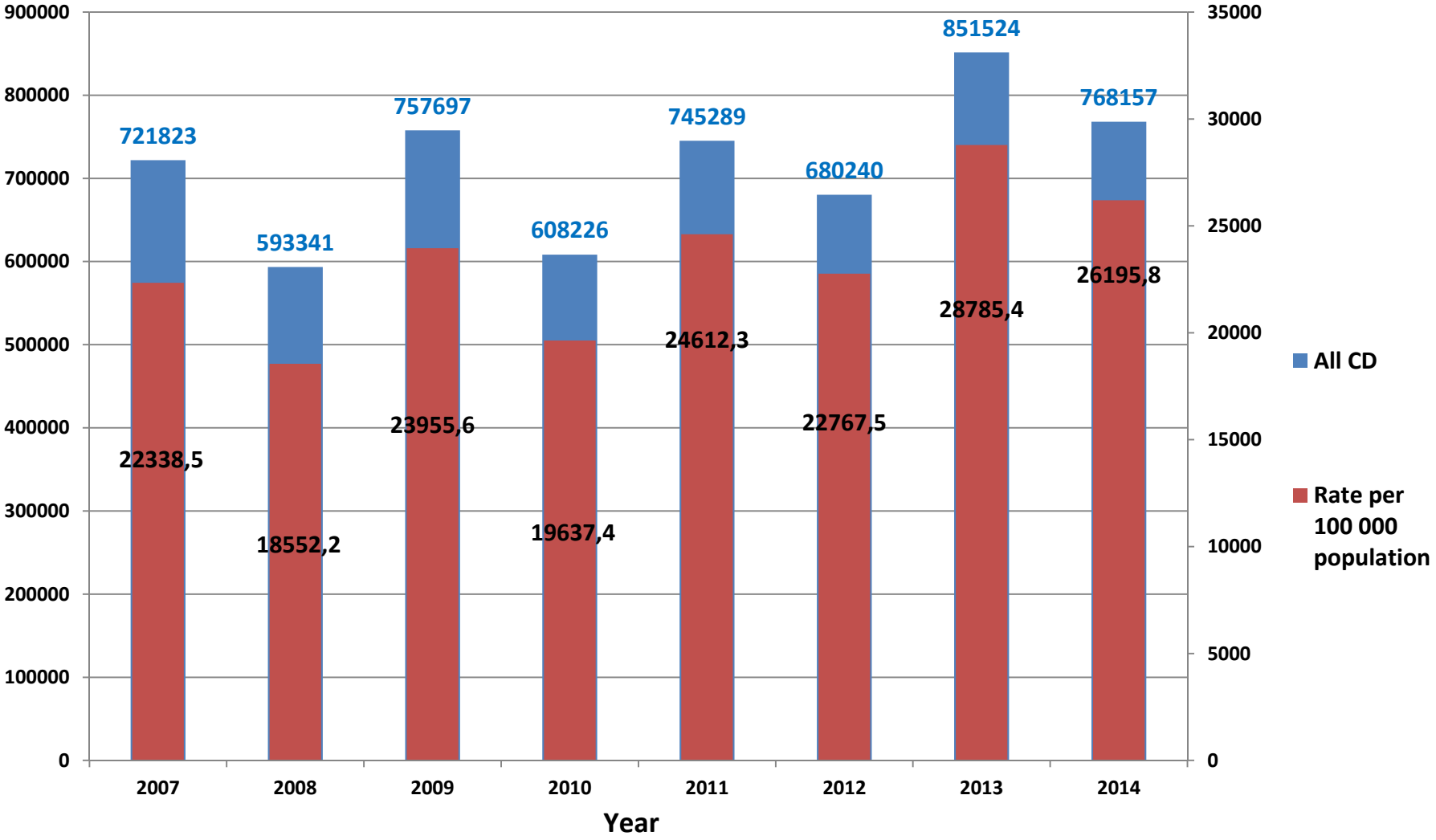
- **LR MoH, 24/12/2002, Order No. 673** ***„On approval of procedure for compulsive epidemiological registration, obligatory content of information about objects for epidemiological registration and mandatory information submission“***
- **LR MoH 10/02/2005, Order No. V-109** ***„On adoption of forms for communicable diseases statistical reporting and accounting“***
- **LR MoH 14/01/2008, Order No. V-19** ***„On approval of Communicable Diseases and Their Agents National Information System and data security provisions of Communicable Diseases and Their Agents National Information System “***

Reporting on communicable diseases to the National Information System of Communicable Diseases and their Agents



Source: ULAC

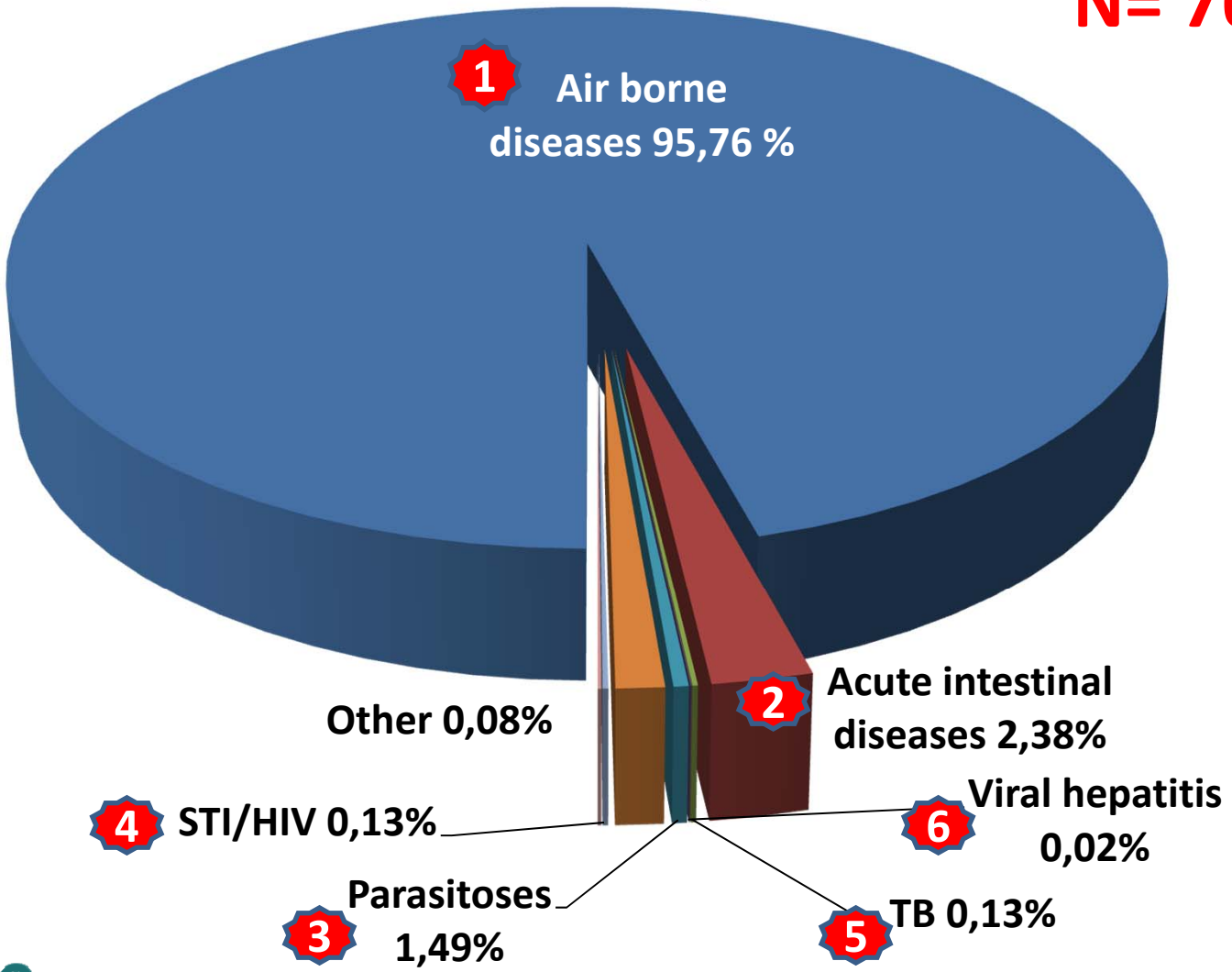
Communicable diseases (CD) cases and Incidence rate in Lithuania, 2007-2014



Source: ULAC

The structure of communicable diseases in Lithuania, 2014

N= 762 588



Source:

ULAC

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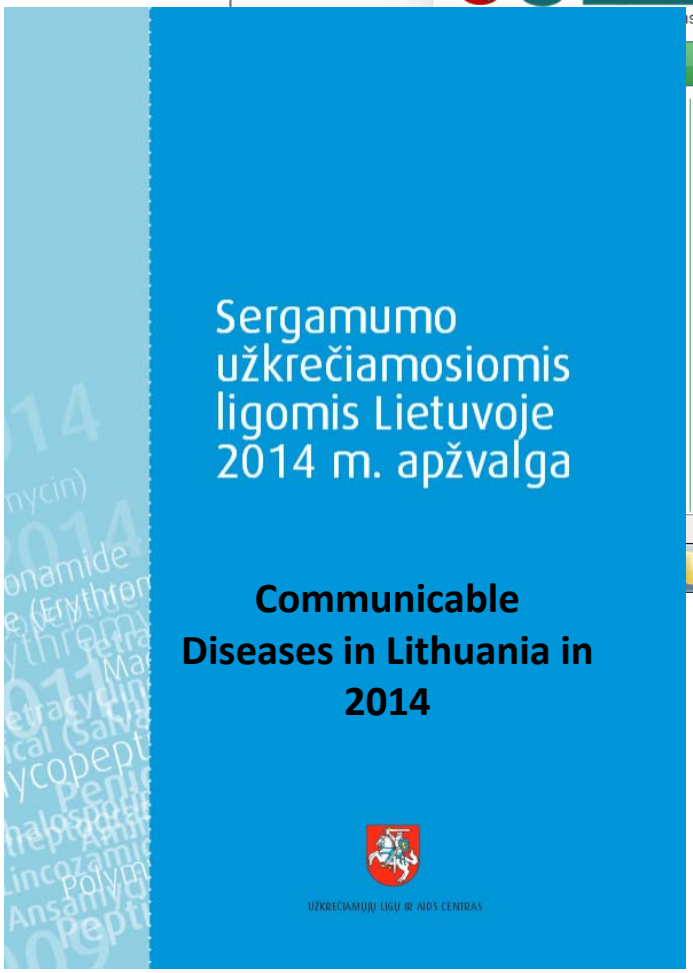
Sergamumo užkrečiamosiomis ligomis Lietuvoje 2014 m. apžvalga
Communicable Diseases in Lithuania in 2014
UŽKREČIAMŲJŲ LIGŲ IR AIDS CENTRAS

Communicable Diseases in Lithuania in 2014 - ULAC - Windows In
http://www.ulac.lt/en/communicable-diseases-in-
File Edit View Favorites Tools Help
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Communicable Diseases in Lithuania in 2014 - UL...
This website wants to run the following add-on: 'Adobe Flash Player' from 'Adobe Systems Incorporated'. If you trust the website and the add-on and want to allow it to run, click here...
LT EN
Accessibilty
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Communicable Diseases in Lithuania in 2014
Since the beginning of 2011, Lithuania has been running a National Information System on communicable diseases and infectious agents (hereinafter - ULSVIS). Pursuant to national law, 82 communicable diseases are designated as compulsory notifiable in Lithuania. ULSVIS collects and stores the information on individual cases of communicable diseases and on the agents of communicable diseases, provided by the professionals of territorial health care institutions and by public health microbiology laboratories, respectively.
Morbidity from communicable diseases among Lithuanian population in the morbidity structure accounts for about 10-20% of all recorded diseases in the country. In 2014, 762,587 communicable diseases were registered in ULSVIS, of which airborne infections account for the major part (96%) in the morbidity structure with 96.5 % of acute upper respiratory tract infections and influenza. The remaining part of the diseases in the morbidity structure was as follows: intestinal infections accounted for 2.3 %, parasitic diseases accounted for 0.28 %, pulmonary tuberculosis accounted for 0.12 %, sexually transmitted infections and HIV accounted for 0.1%, viral hepatitis accounted for 0.02 %, and other infectious diseases accounted for 1.18 %.
Search
Useful links
Communicable Diseases 2014
Communicable Diseases 2013
Communicable Diseases 2012
Communicable Diseases 2011
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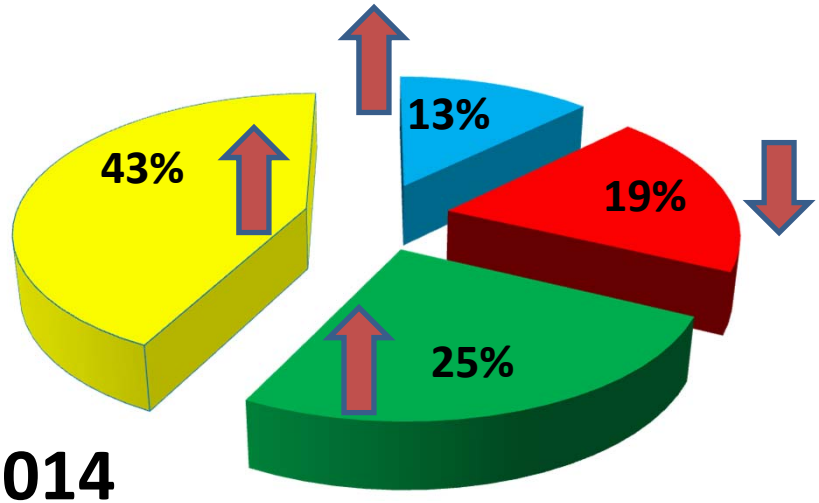
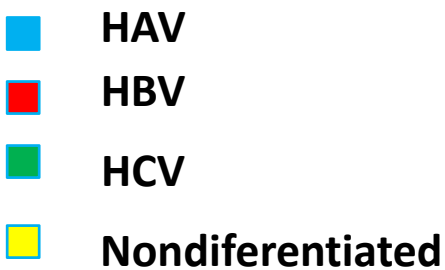
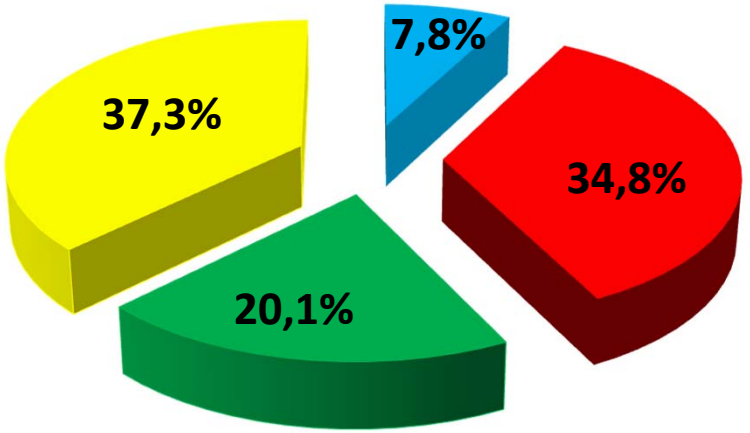
Acute Viral Hepatitis in Lithuania





2014

N=134



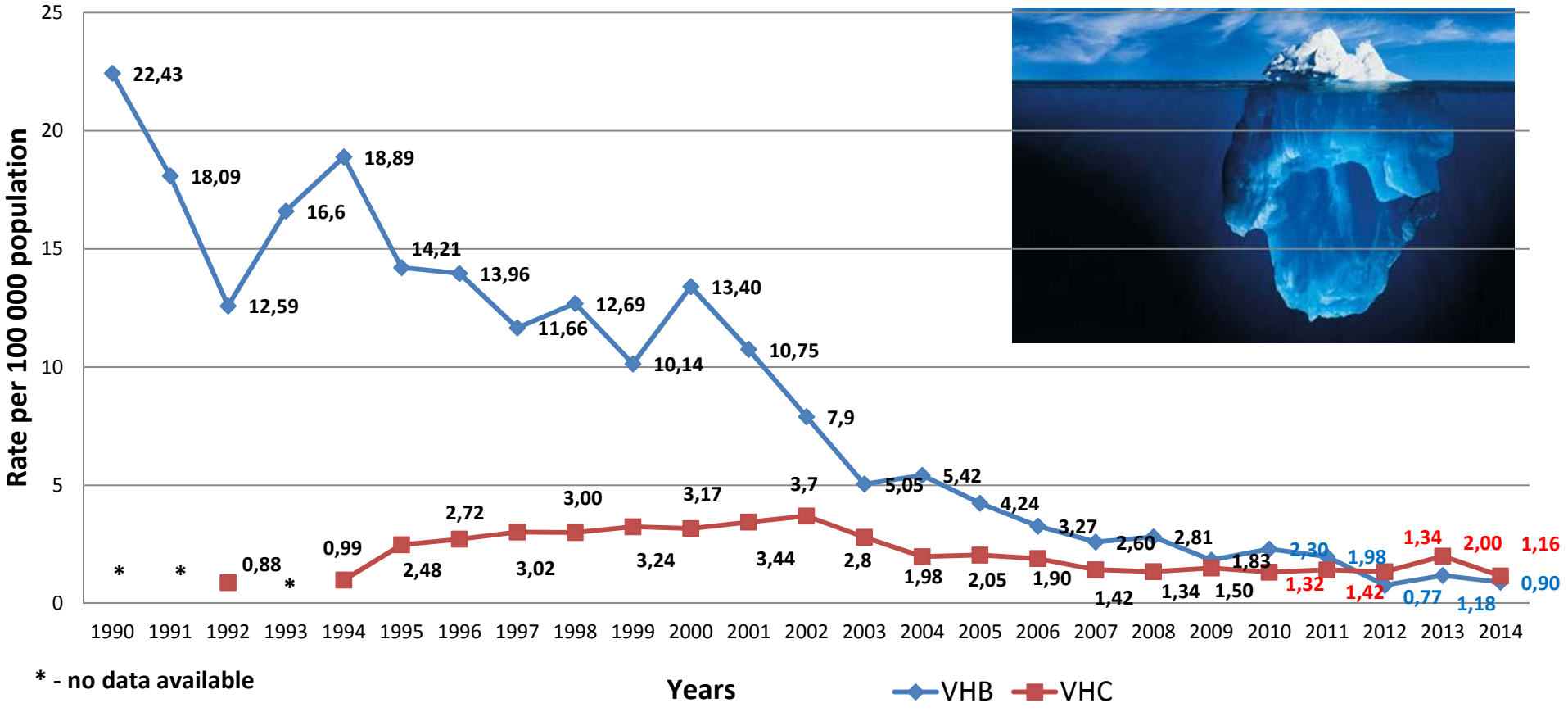
2010

N=204

Source:

ULAC

Incidence rate of acute viral hepatitis C and B (VHC and VHB) in Lithuania, 1990 – 2014

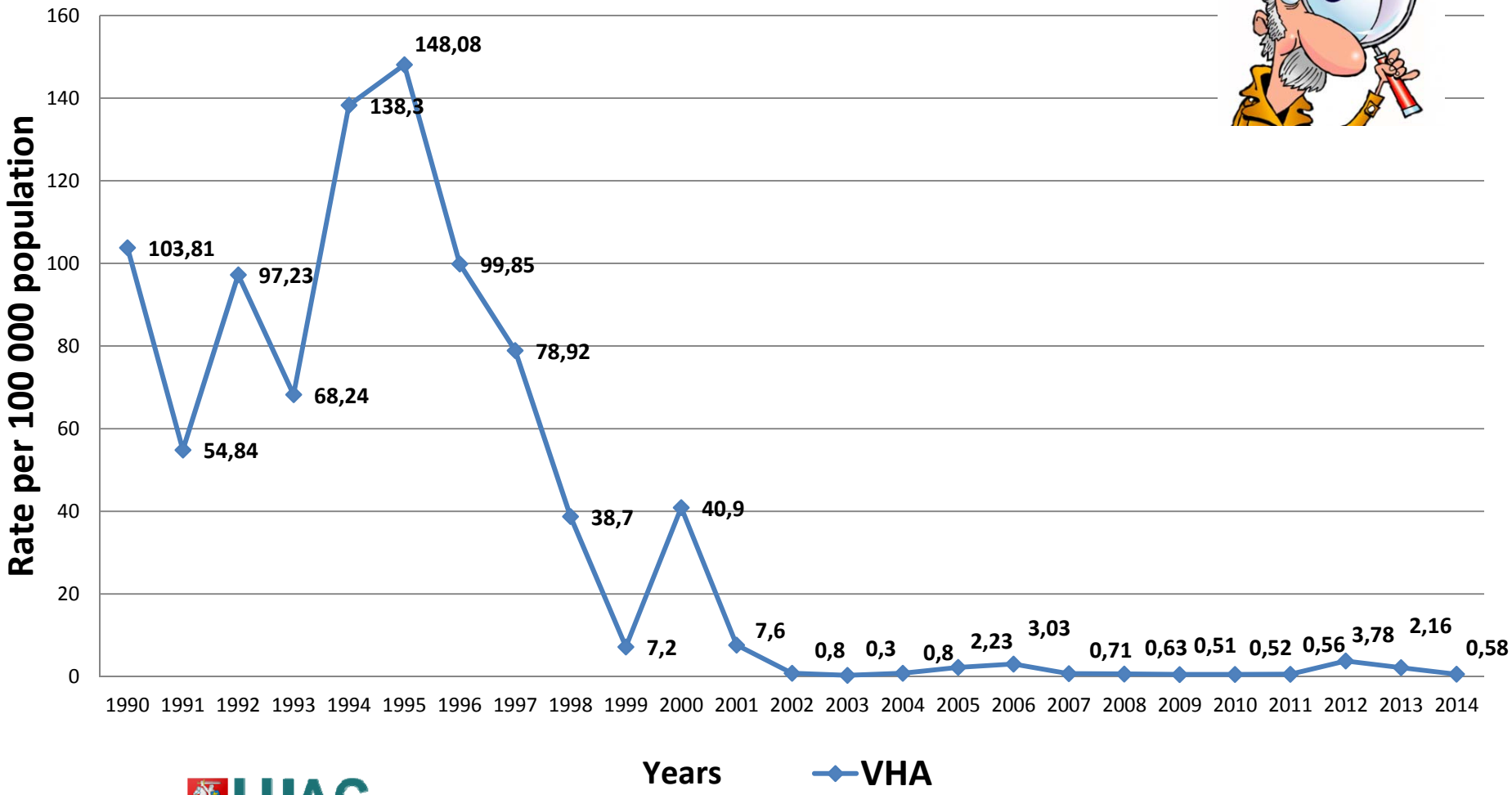


* - no data available

Source: UIAC

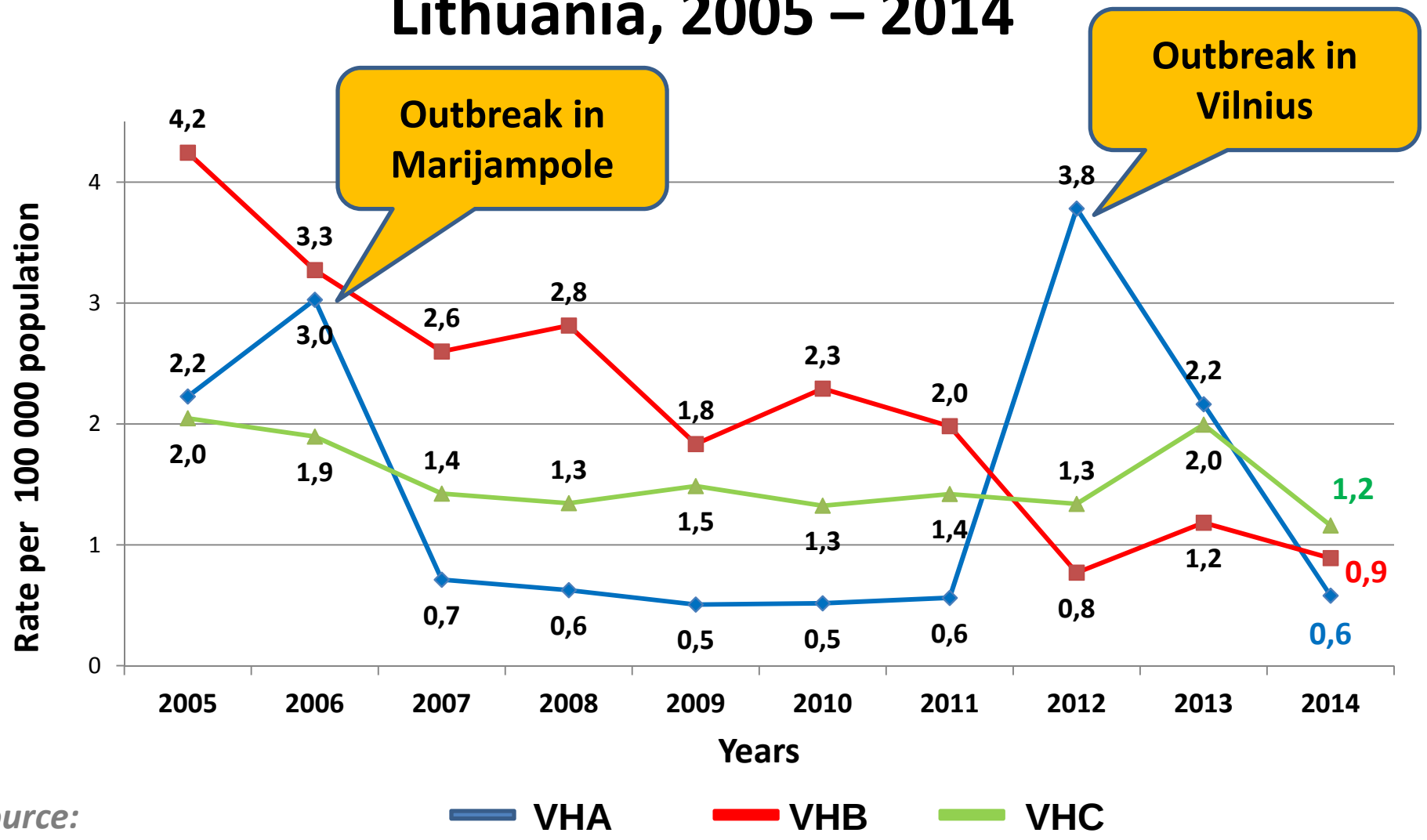
Centre for Communicable Diseases and AIDS

Incidence rate of acute viral hepatitis A (VHA) in Lithuania, 1990 – 2014



Source: ULAC

Incidence rate of acute VHA, VHB and VHC in Lithuania, 2005 – 2014



Source:

ULAC

HCV and HBV infection trends

Registered cases in Lithuanian HC institutions in 2014

VHC cases

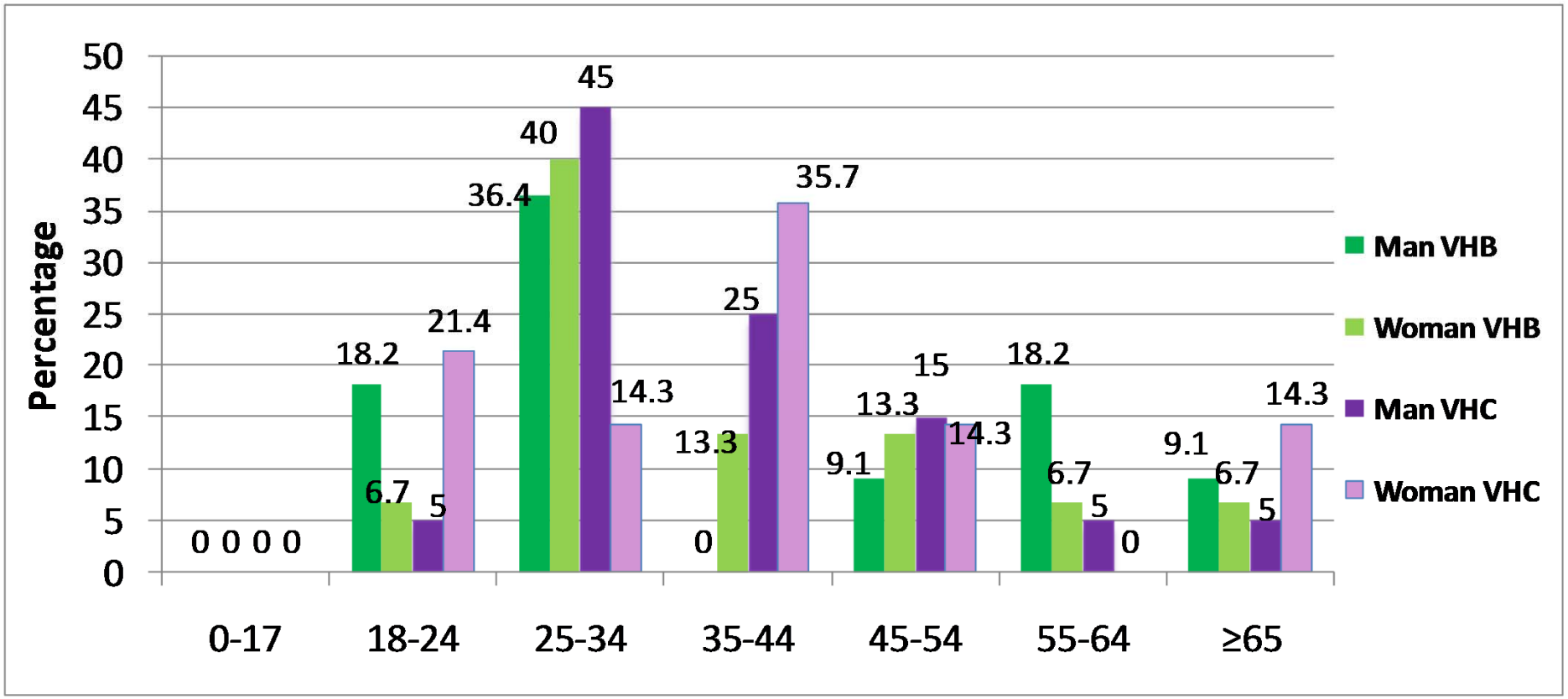
- **34 acute**
  - in 2013 - 59; 2012 - 40; 2011 - 43; 2010 - 41
- **46 chronic**
- **0,11 - acute VHC morbidity rate of (cases/10 000 pop.)**
  - in 2013 - 0,2;
  - 2012 - 0,13;
  - 2011 - 0,13

VHB cases

- **26 acute**
  - in 2013 – 35; 2012 - 23; 2011 - 60; 2010 – 73
  - **3 chronic**
- **0,089 - acute VHB morbidity rate of (cases/10 000 pop.)**
  - in 2013 - 0,12;
  - 2012 - 0,07;
  - 2011 - 0,19

Source: ULAC

Distribution of acute HCV and HBV cases by age groups and gender in Lithuania, 2014



Source: ULAC

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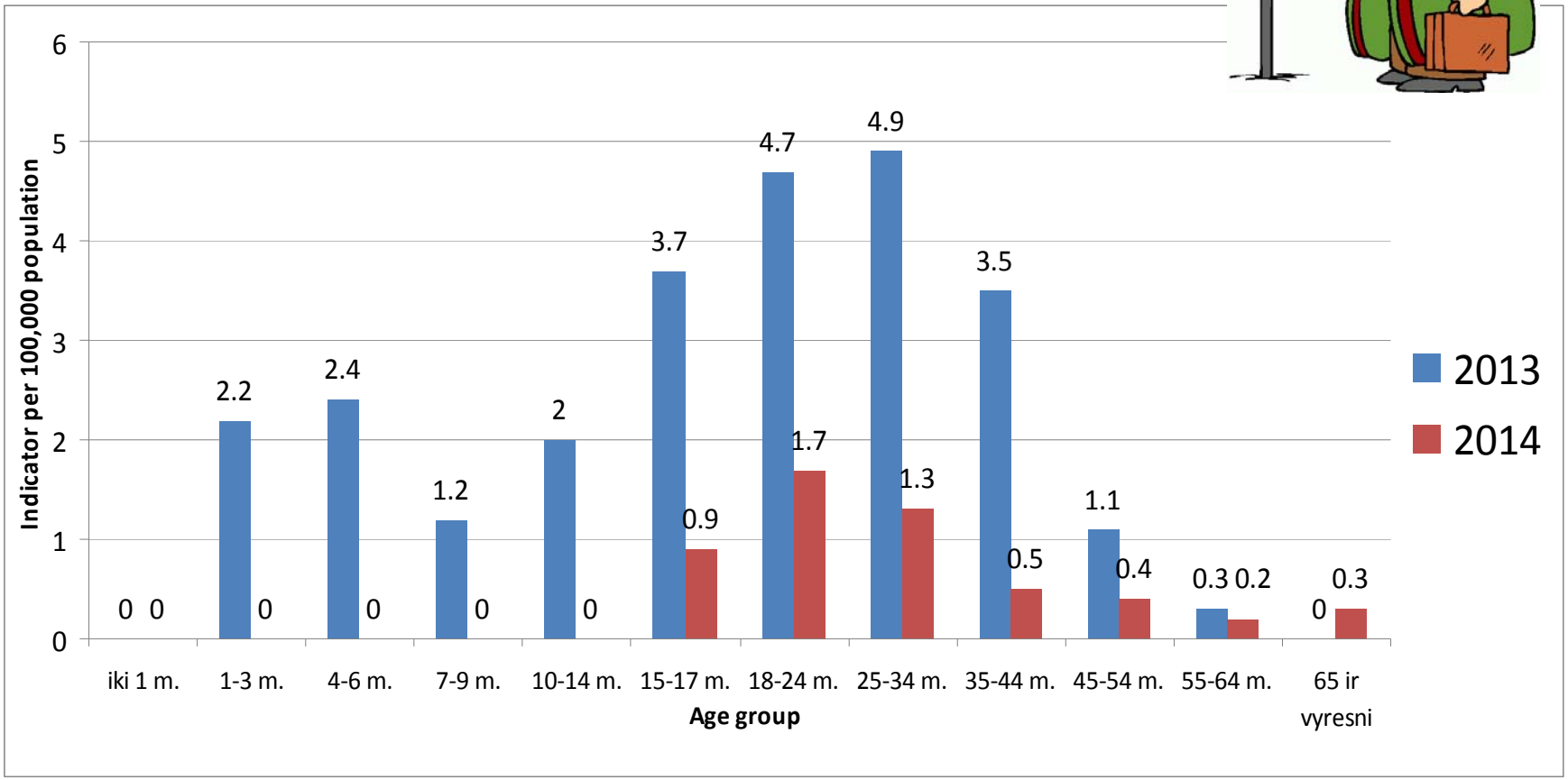
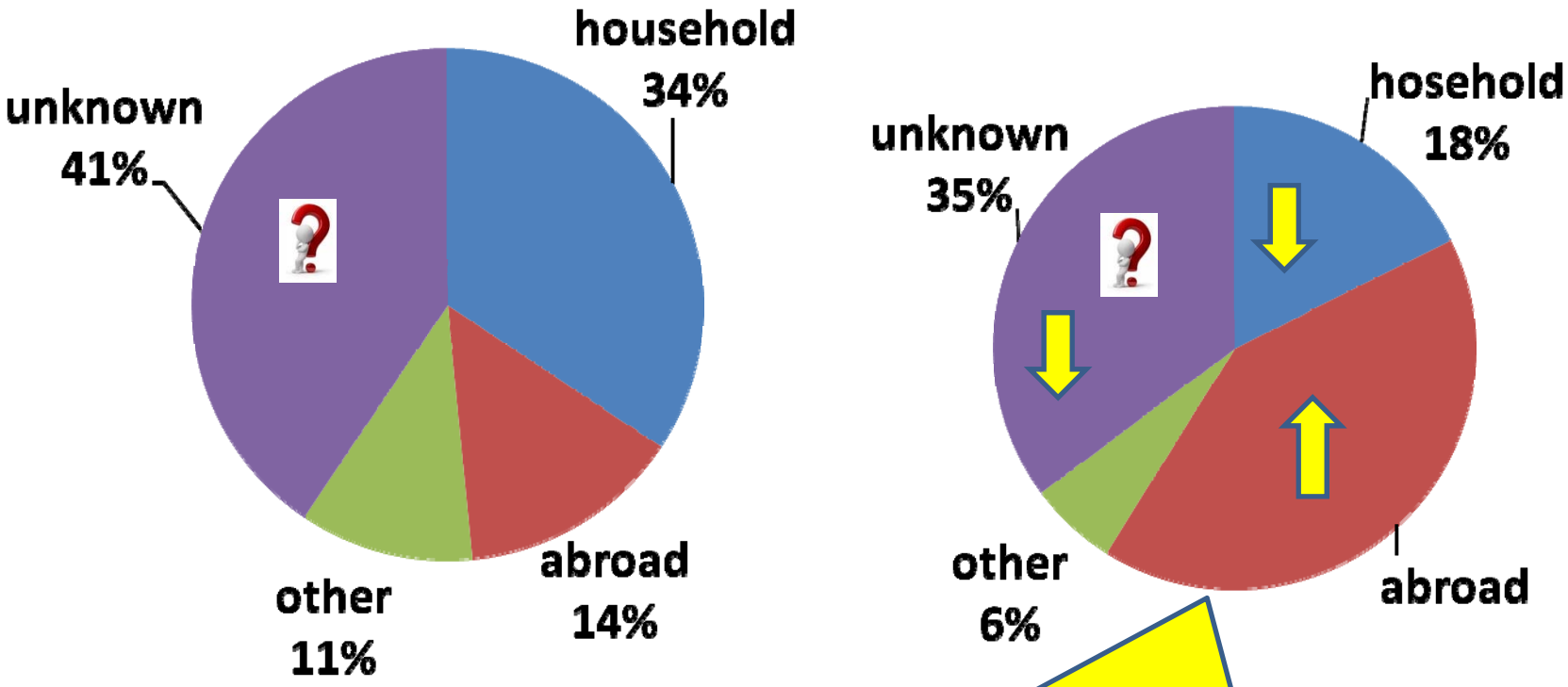
HAV incidence by age groups in Lithuania, 2013-2014



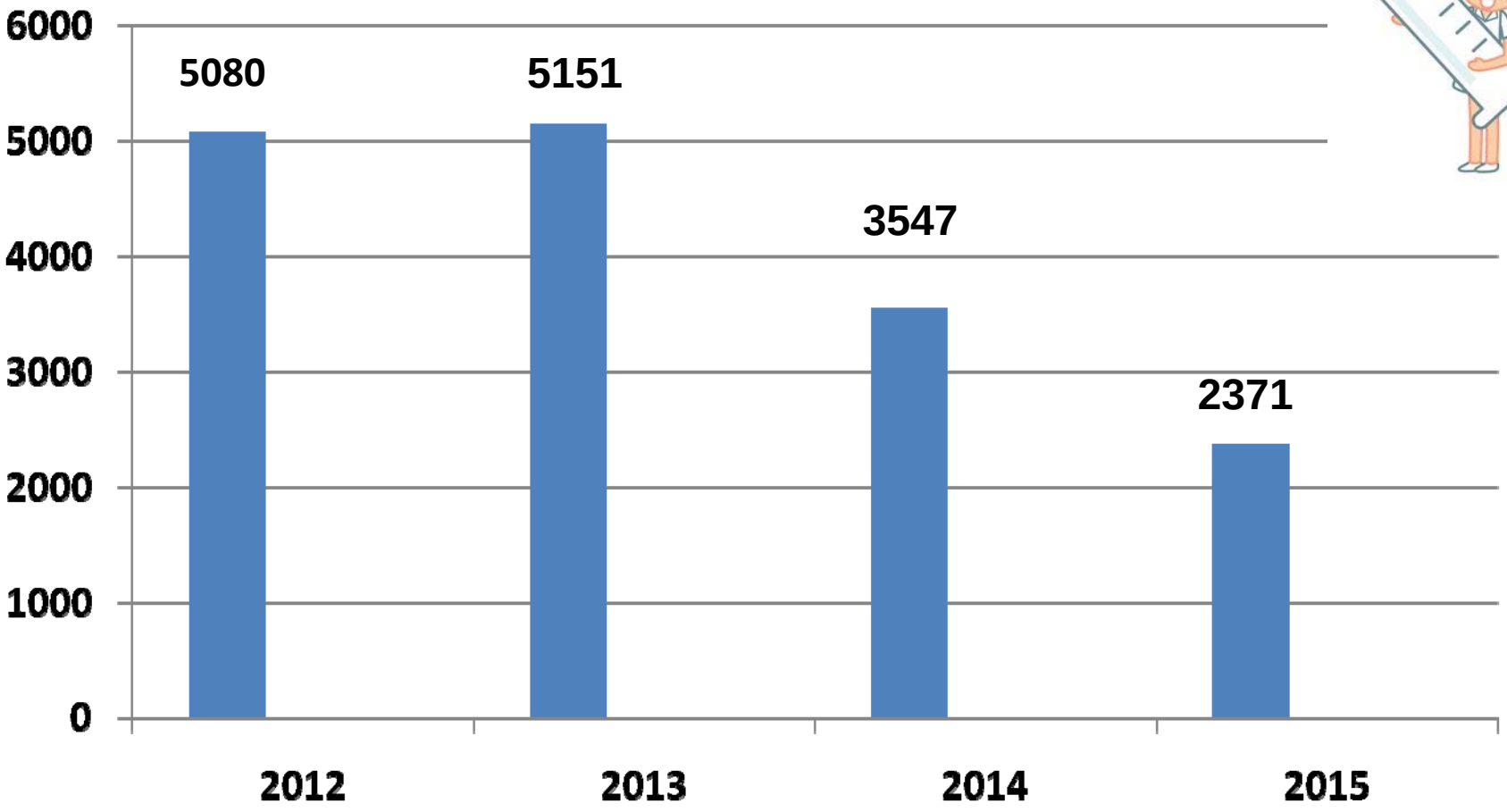
Source: ULAC

HAV infection place in Lithuania, 2013 – 2014 (patient survey data)



Source: ULAC

Number of vaccinations with HA vaccine in Lithuania, 2013 - 2015



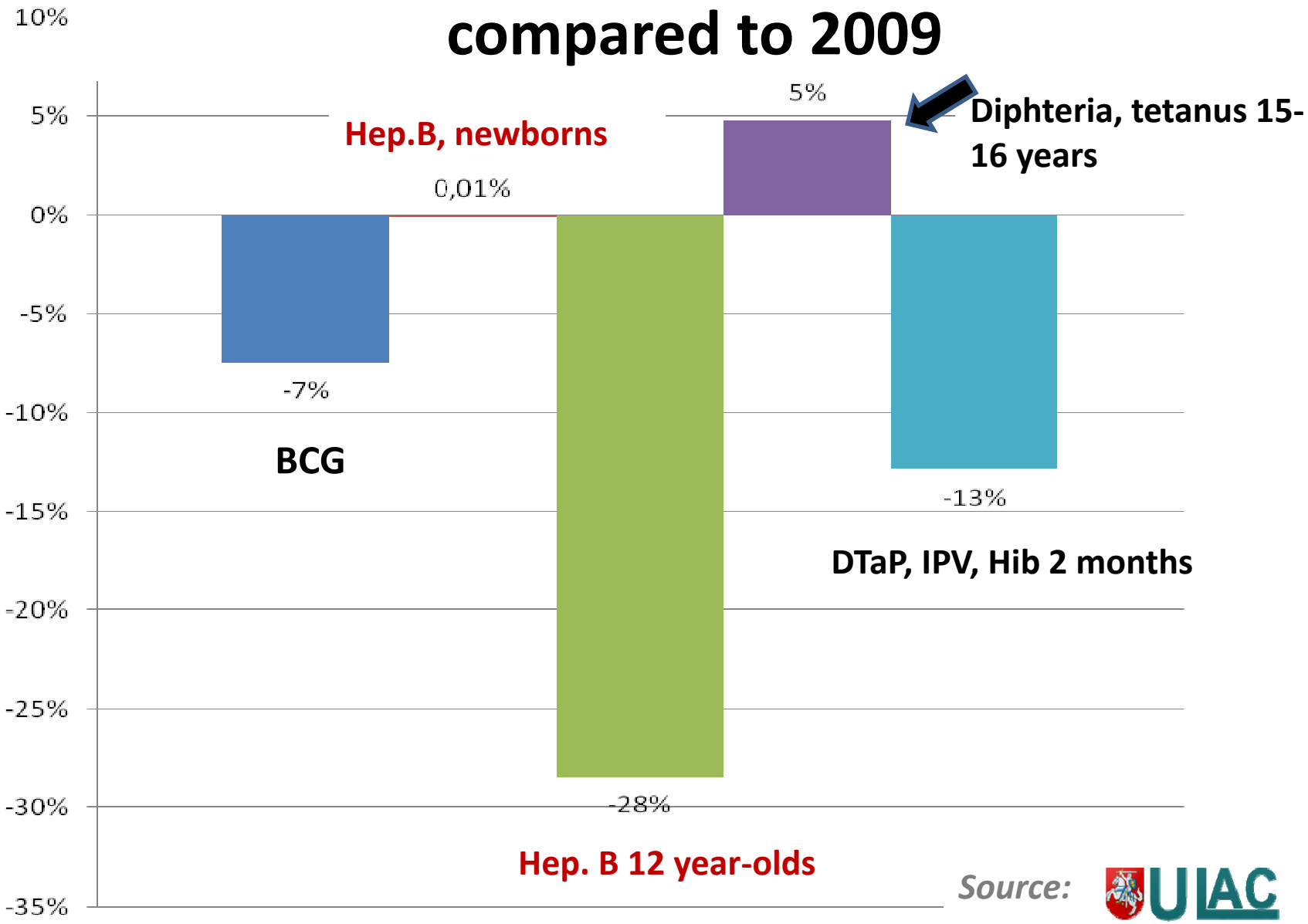
Source: ULAC

Children's vaccination against VHB in Lithuania

- The **newborns** have been vaccinated against hepatitis B **since 1998**.
- **Since 2002** vaccination against hepatitis B of the **12 years-olds**, who's vaccination was **finished in 2010**, has been included into children's preventative vaccination schedule because generation of the 12 years-olds, who (as newborns) have been vaccinated since 1998, grew up.

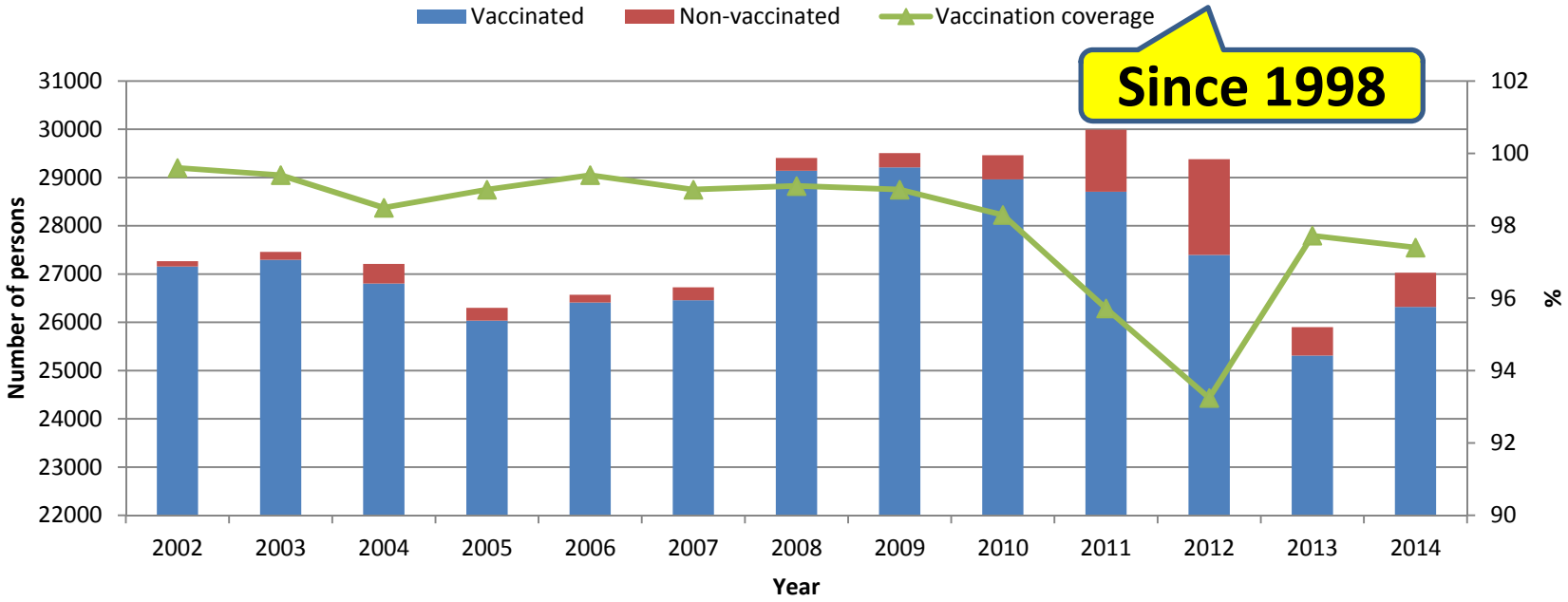
Source: ULAC

Vaccination variationv (%), 2010 as compared to 2009



Source: ULAC

Hepatitis B vaccination (newborns)



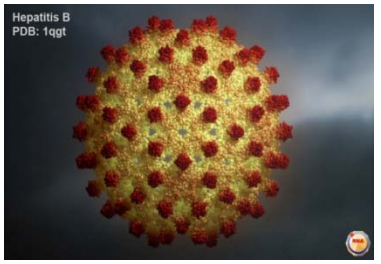
Year	Number of persons	Vaccinated.	Non-vaccinated	Vaccination coverage/%
2002	27267	27158	109	99.6
2003	27459	27294	165	99.4
2004	27211	26803	408	
2005	26299	26036	263	
2006	26570	26411	159	
2007	26724	26457	267	
2008	29407	29142	265	
2009	29506	29211	295	
2010	29461	28960	501	98.3
2011	29990	28707	1283	95.7
2012	29381	27396	1985	93.2
2013	25899	25311	588	97.7
2014	27028	26319	709	97.4

Non vaccinated
6 997

Source:

ULAC

Prevalence of HBV infection



- **HBV markers** are found in **30%** of global population
- **1 mill. new infections** occur **annually in Europe**
- In EU countries **VHB incidence is <u>decreasing</u>**
- **HBsAg prevalence** varies **from 0,1% to 7% i**n general population in EU countries

HBsAg prevalence levels:

<2% - low,

2-7% - moderate,

>8% - high

Source: World Health Organization, ecdc

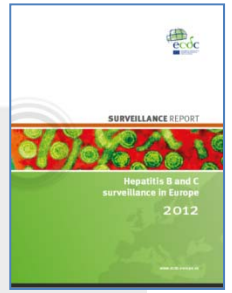


Figure 1: Number of reported acute hepatitis B cases per 100000 population in EU/EEA countries, 2012

< 0.8
0.8–1.4
1.5–4.4
No data
Excluded

Reported <u>acute</u> HBV per 100 000 population

EU/EEA total 0.8

0.7
3.7
0.8

Liechtenstein
Luxembourg
Malta

Source, country reports: Austria, Bulgaria, Cyprus, Denmark, Estonia, Finland, France*, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom (excluding Scotland).
*Under-reporting was estimated in France to be 85% for acute hepatitis B cases in 2010.

Source:European Centre for Disease Prevention and Control. Hepatitis B and C surveillance in Europe. 2012. Stockholm: ECDC; 2014.

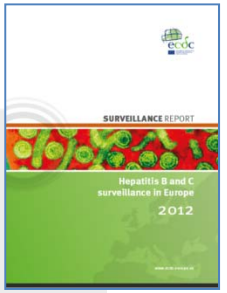


Figure 2: Number of reported chronic hepatitis B cases per 100 000 population in EU/EEA countries, 2012

< 3.0
3.0–8.9
9–14.9
No data
Excluded

Reported <u>chronic</u> HBV per 100 000 population

EU/EEA total 8.6

3.1

3.3

Non-visible countries
Liechtenstein
Luxembourg
Malta

Source, country reports: Austria, Denmark, Estonia, Finland, Ireland, Latvia, Netherlands, Norway, Romania, Slovakia, Slovenia, Sweden, United Kingdom (excluding Scotland).

Source:European Centre for Disease Prevention and Control. Hepatitis B and C surveillance in Europe. 2012. Stockholm: ECDC; 2014.

Prevalence of HCV infection

- **HCV markers** are found in **3%** of global population
- **2 mill. new HCV infections** worldwide each year
- About **30 000 new** hepatitis C cases are reported in **EU** and **EEA** countries each year.
- In EU countries **VHC incidence is <u>decreasing</u>**
- **Anti-HCV prevalence** varies **from 0.4% to 3.5% i**n general population in EU countries

Source: World Health Organization, ecdc

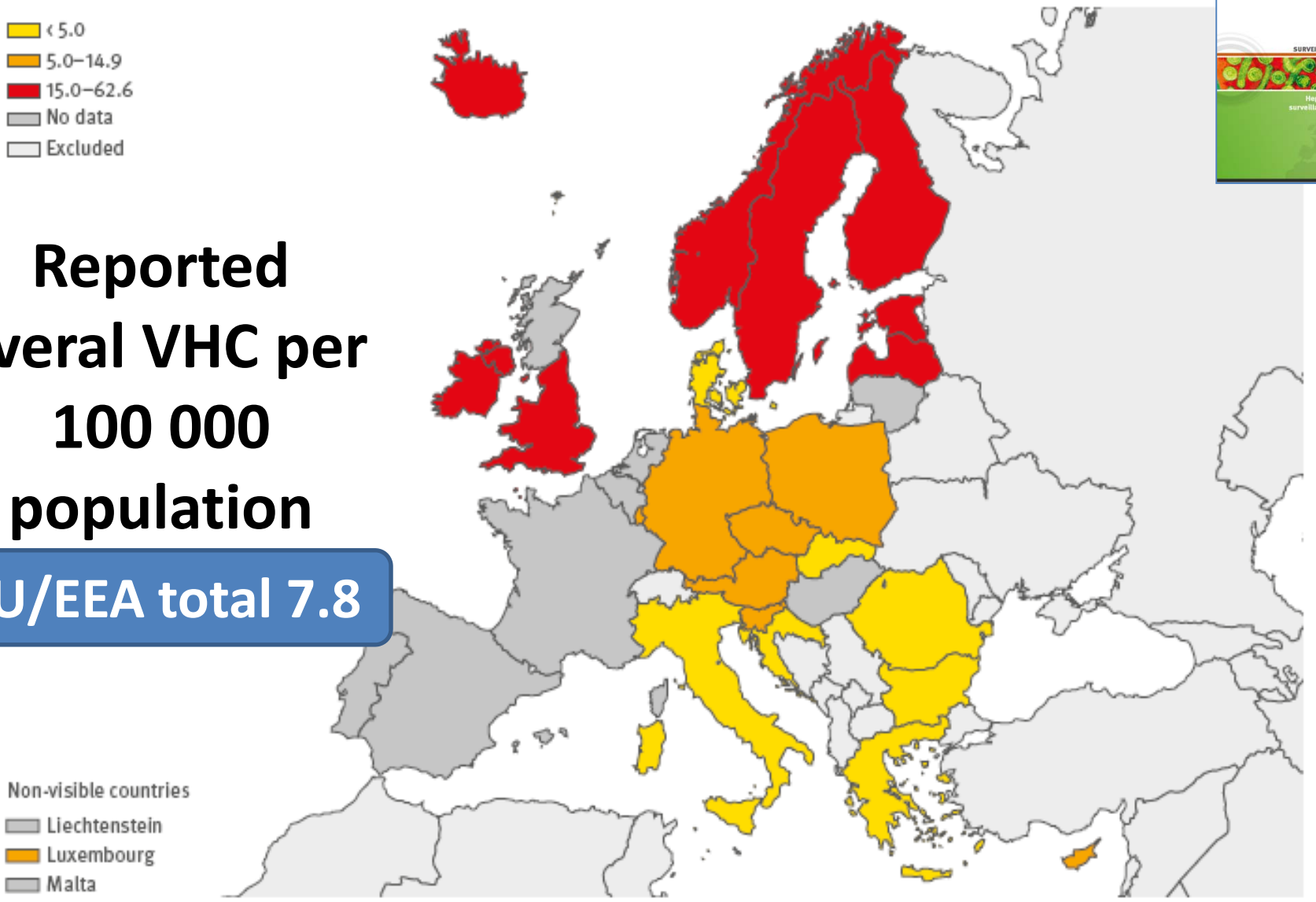
Anti-HCV prevalence levels:

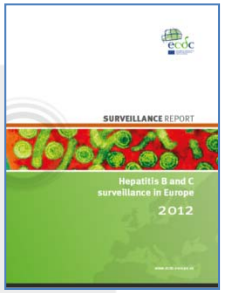
≤1% - Low

>1-≤2% - Medium

>2% - High

Figure 8: Number of reported hepatitis C cases per 100 000 population in selected EU/EEA countries, 2012





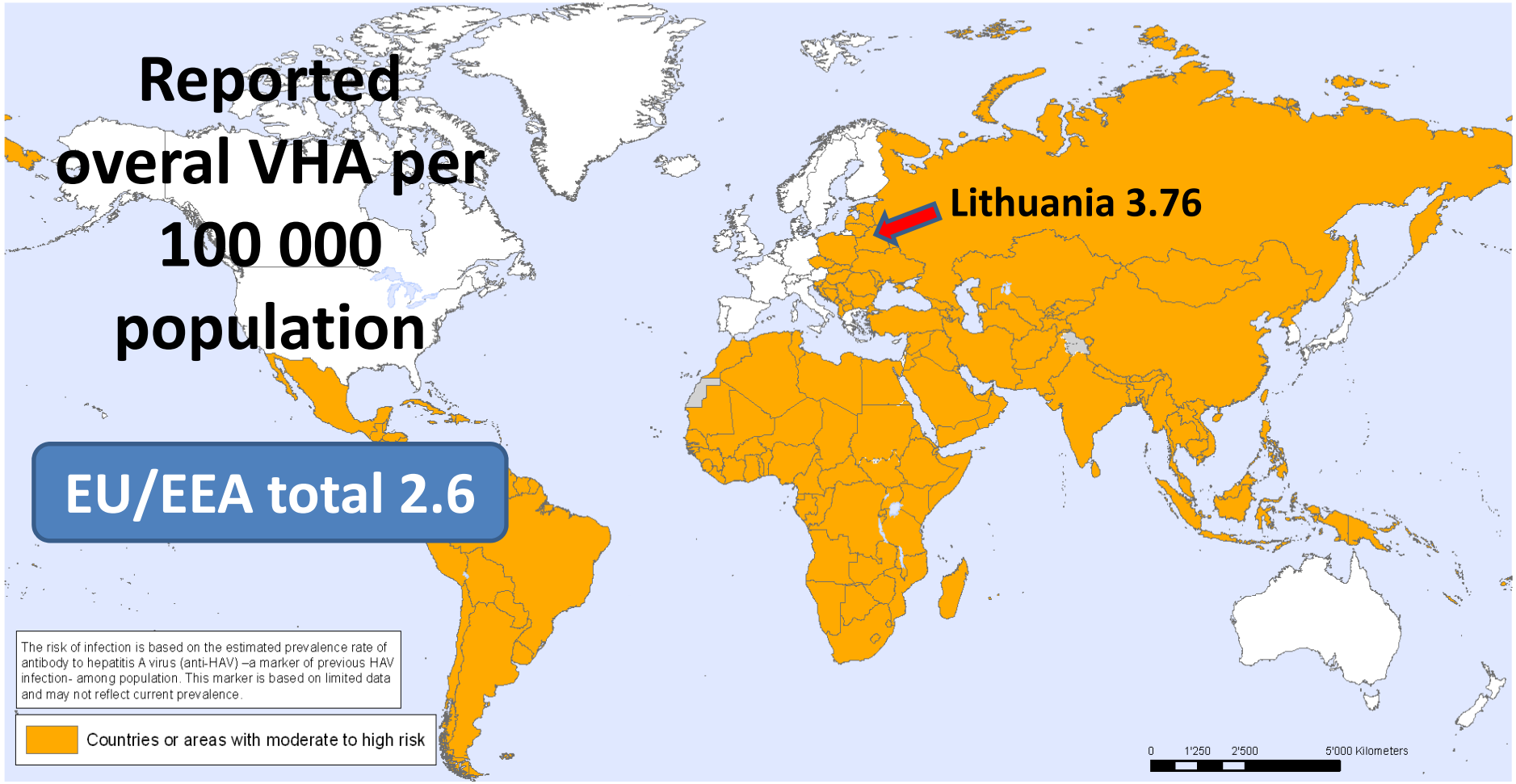
Reported overal VHC per 100 000 population

EU/EEA total 7.8

Source: country reports – Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Iceland, Ireland, Italy, Latvia, Luxembourg, Norway, Poland, Romania, Slovakia, Slovenia, Spain, United Kingdom.

Source:European Centre for Disease Prevention and Control. Hepatitis B and C surveillance in Europe. 2012. Stockholm: ECDC; 2014.

Hepatitis A, countries or areas at risk



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization.
Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region, 1990 and 2005. Vaccine 2010 Sep;28(41):6653-7
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization

World Health Organization

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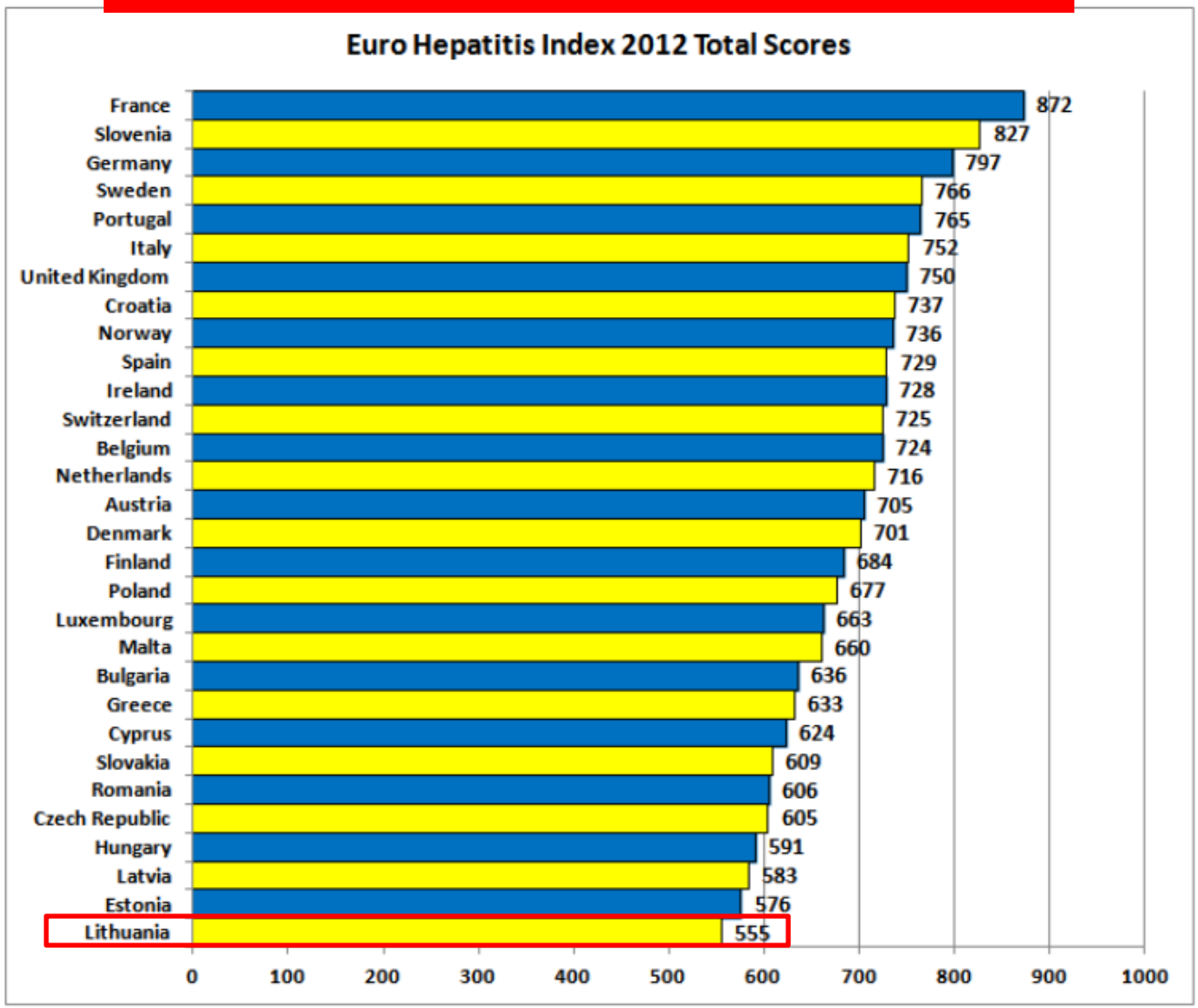
Response to viral hepatitis in EU countries

Indicator categories :

- ✓ Prevention
- ✓ Screening
- ✓ Treatment availability
- ✓ National strategy/NGO activities
- ✓ Outcomes

Euro Hepatitis Index 2012



Total score
1000

Source: Health Consumer Powerhouse. Euro Hepatitis Index 2012 Report
http://www.healthpowerhouse.com/files/euro-hepatitis-index-2012/Report-Hepl-HCP-121104-2-w-Cover.pdf

Euro Hepatitis Index 2012

Sub-discipline	Top country/countries	Top Scores	Maximum score	Lithuania	Latvia	Estonia
1. Prevention	Germany, Ireland, Slovenia, Switzerland	249	275	157	157	196
2. Case finding/Screening	France, Norway, Slovenia, Sweden	200	225	100	100	100
3. Access to treatment/Process	France, Sweden	216	225	131	159	141
4. National Strategy/ Patient involvement and rights	France, Bulgaria, UK	97	125	83	83	56
5. Outcomes	France	150	150	83	83	83
				555	583	576

Source: Health Consumer Powerhouse. Euro Hepatitis Index 2012 Report
http://www.healthpowerhouse.com/files/euro-hepatitis-index-2012/Report-Hepl-HCP-121104-2-w-Cover.pdf