



# Viral Hepatitis Prevention Board

Antwerp | Belgium  
November 2014

## Two decades of the VHPB: achievements, impact and remaining challenges in prevention and control of viral hepatitis

Survey on prevention and control of  
viral hepatitis in 53 European countries in 2014

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viral hepatitis prevention board

**Survey on prevention and control of viral  
hepatitis in 53 European countries 2014**

*Draft*

Antwerp/ Belgium  
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## **Survey: Prevention and Control of viral hepatitis in Europe, 2014**

### **Introduction**

Viral hepatitis affects millions of people worldwide, causing acute and chronic liver disease and killing more than 1 million people every year. In the 53 countries of the European Region of the World Health Organization (WHO), the number of chronic hepatitis B carriers and chronic hepatitis C infections is estimated at 13 million and 15 million respectively, affecting 1 out of 50 people. Moreover hepatitis B causes about 36 000 deaths and hepatitis C about 86 000 deaths per year. Two-thirds of infected persons in the Region live in eastern Europe and central Asia (1). Hepatitis B is preventable with a safe and effective vaccine but treatment is currently not sufficiently successful and has a lot of side effects. Hepatitis C is not preventable by vaccination, however, current treatment regimens offer high cure rates. But in most European countries, the accessibility at an affordable price is a burning issue, especially for the new developed drugs(2) .

Although declining incidence of hepatitis A due to improvements in hygiene and sanitation can be expected in the Region, hepatitis A remains a certain threat to public health because of reduced population protection and a shift in the age-specific sero-prevalence rates, which facilitates outbreaks (with proportionally more symptomatic cases).

Therefore, creating awareness, and promoting prevention and control of viral hepatitis in the European region is still needed. But before developing tailored national or regional prevention and control strategies, a review of the current hepatitis situation in each of the 53 European countries is recommended. Based on the lessons learnt, remaining challenges in prevention and control need to be defined.

The Viral Hepatitis Prevention Board (VHPB), established in 1992, is an independent, international and multidisciplinary group of experts aiming to increase awareness on hepatitis as a major health hazard and to encourage actions to improve control and prevention of viral hepatitis in Europe. Among their activities, the VHPB brings together twice a year an international forum of specialists to discuss on specific topics related with the prevention and control of viral hepatitis, and share experiences of countries within the European region and beyond, to learn from each other.

In November 2014, the VHPB organizes a meeting entitled "Two decades of the VHPB; achievements, impact and remaining challenges in prevention and control of viral hepatitis". One of the objectives of this meeting is to review the progress made over the past 20 years in the prevention and control of viral hepatitis in the WHO European region. Representatives of the 53 countries were invited to update information on the prevention and control of viral hepatitis in their country in a poster template. A booklet of this survey will be distributed at the start of the meeting and the results of the survey will be presented and discussed.

## Methodology

For each country, a poster template was prepared (by the scientific VHPB secretariat) and send to the WHO Euro EPI-manager for validation of the information presented and further completion whenever possible. The information on viral hepatitis prevention and control activities during the past 20 years was collected from previous survey reports and scientific publications.

As far as possible available data from reports/documents from the WHO (Global policy report, vaccination coverage) and European institutions, such as the European Centre for Disease Prevention and Control (ECDC), the European Monitoring Centre for Drugs and Drug Addition (EMCDDA) and the Council of Europe, were used.

In addition, a literature review by country was performed in July-September 2014. Articles indexed in the PubMed database were searched by using the following key words: "hepatitis B or hepatitis C or HBV or HCV or viral hepatitis" and "epidemiology, incidence, prevalence, injecting drug users (IDU), men having sex with men (MSM), sex workers, prisoners, immigrants, blood donors, health care workers, haemodialysis patients". The search was restricted to publications written in English (or abstract in English), from the last 20 years.

For sero-prevalence data, recently published review papers were used as reference. Most recent nationwide studies were used if available. If no national study was conducted or published, regional studies were used as reference. If the year of the sero-prevalence study was not mentioned in a paper, the year before the publication date was used as proxy.

The pre-filled posters were then reviewed by the EPI managers or persons in charge of hepatitis in the respective countries, to validate the data or replace and complete the information with data from unpublished studies. Whenever needed, the posters were amended and validated again by the local contact persons, before including them in the booklet. For validated posters (see symbol  in the title) ,the name of the contact person has been registered on the poster.

The first draft of the survey will be distributed and discussed during the VHPB meeting 13-14 November 2014 in Antwerp, Belgium: "Two decades of the VHPB: achievements, impact and remaining challenges in prevention and control of viral hepatitis".

After the meeting, and once the first draft has been adapted, an analysis and discussion will be added in the final version including the input from the discussion of this meeting. Countries will have the opportunity to validate or complete the posters up to the end of November, in order to have their poster included in the booklet. The final results will be published on the VHPB website – [www.vhpb.org](http://www.vhpb.org), by the end the year.

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## Acknowledgement

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Also Alex Vorsters and Emmy Engelen of the VHPB secretariat for respectively the review of the poster template and the technical support.



# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ALBANIA



## Country profile

- Population (in millions) (year): 3,2 (2013)<sup>a</sup>
- Gross national income per capita (int \$) (year): 10 520 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	9.5 % (2004-2006) <sup>1</sup>	
Blood donors (first time)	8.1 % (1999-2009) <sup>2</sup>	0.5 % (2001) <sup>d</sup>
Pregnant women	6.4%-2005	1%-2005
Risk groups		
IDU	12.4 % (2005) <sup>3</sup>	26.5%(2011)
MSM	15.2%(2005)	3.5%(2008)
Health care workers	8.1 % (2004) <sup>4</sup>	0.6 % (2004) <sup>4</sup>

## Screening

	Hep B	Hep C
<b>Recommended for following groups:</b>		
Blood and organ donors	Yes (1975) <sup>2</sup>	Yes (since year ?) <sup>f</sup>
Pregnant women	Ad hoc	Ad hoc
Injecting drug users	Yes	Yes
STI clinic patients	Yes	Yes
Haemodialysis patients	Yes	Yes
Health care workers	Ad hoc	Ad hoc
Men having sex with men	Ad hoc	Ad hoc
Prison population	Ad hoc	Ad hoc
Migrants	yes	Ad hoc
Others	Ad hoc	Ad hoc

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers	
Hepatitis B <sup>h</sup>			
Universal	Yes	Newborn	1994-ongoing
Catch-up	yes	Birth cohorts 1992-1993	2010
Risk group	Yes	Students of Birth cohorts 1991 (medicine, nursing, dentistry) Health care workers Injecting drug users	2012 2000, 2012, 2013 continuous since 2002

## Treatment

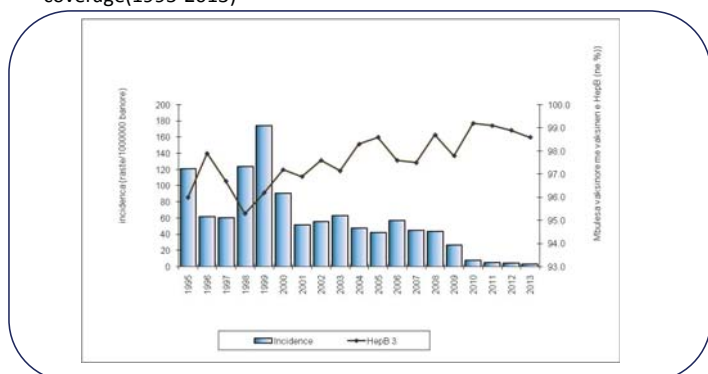
National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	yes (2011)
Hepatitis C	yes (2011)
Drugs available for hepatitis C treatment* <sup>f</sup>	yes
Ribavirin	yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## National plan

Yes there is a plan for prevention of viral hepatitis in Albania. A current new plan that focuses exclusively on the prevention and control of viral hepatitis is underway and planned to be discussed with different stake holders in February 2015<sup>f</sup>.

Figure 1: Incidence of unspecified viral hepatitis compared to vaccination coverage (1995-2013)



## Impact

Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

- New national strategy on viral hepatitis and new policies for hepatitis B and C prevention in health care workers
- Establishing indicators of Hepatitis B and C control
- Pregnant women survey of Hepatitis B and C
- Health care worker survey for Hepatitis B and C

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ANDORRA



## Country profile

- Population (in millions) (year): 0,07 (2011)<sup>2</sup>
- Gross national income per capita (int \$) (year): \$37,200 (2011)
- Most recent seroprevalence data: 2000

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0 % (2002) <sup>d</sup>	0 % (2002) <sup>d</sup>
Pregnant women	-	-
Risk groups	-	-

## Screening

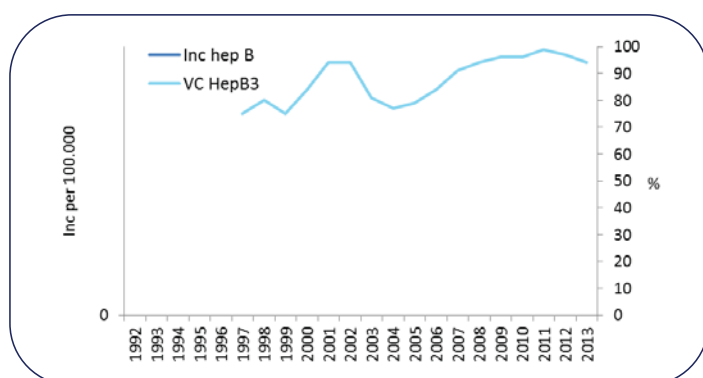
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	No blood bank <sup>f</sup>	No blood bank <sup>f</sup>
Pregnant women	Yes (since year ?) <sup>1</sup>	Yes (next year 2015)
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	?	?
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence



## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Recommended Immunizations for Adults*	2011-ongoing
Hepatitis B <sup>h</sup>			
Universal	Yes	Newborn Adolescent ?	1997-ongoing
Catch-up	?		
Risk group	Yes	Recommended Immunizations for Adults born after 1980 <sup>3</sup>	2011-ongoing

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	(Protocol: Next year 2015)
Drugs available for hepatitis C treatment <sup>**f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No (available next year 2015)
Sofosbuvir	No (available next year 2015)
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ARMENIA



## Country profile

- Population (in millions) (year): 3,1 (2011)<sup>f</sup>
- Gross national income per capita (int \$) (year): 8140 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	1.8% (2013)	3.6% (2013)
Blood donors (first time)	0.6 % (2003) <sup>d</sup>	1.9 % (2003) <sup>d</sup>
Pregnant women	1.55% (2013)	0.6 % (2013)
Risk groups		
IDU	-	85 % (2006) <sup>1</sup>

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes Surface Antig. 1960 Core Antig. 2006	Yes (1996)
Pregnant women	No	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	No	No
Health care workers	Yes (2005)	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others: HIV patients	Yes (2008)	Yes (2008)

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Contacts of VHA patients, travelers	2007
Hepatitis B <sup>h</sup>			
Universal	Yes	Newborn	1999-ongoing
Catch-up	No		
Risk group	Yes ?	Health Care Workers (having contact with biological liquids)	2008

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	NA
Number of patients treated for hepatitis C	NA

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence (info from country contact)

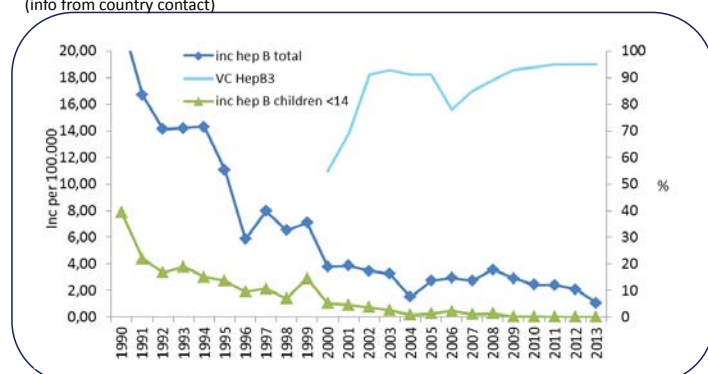
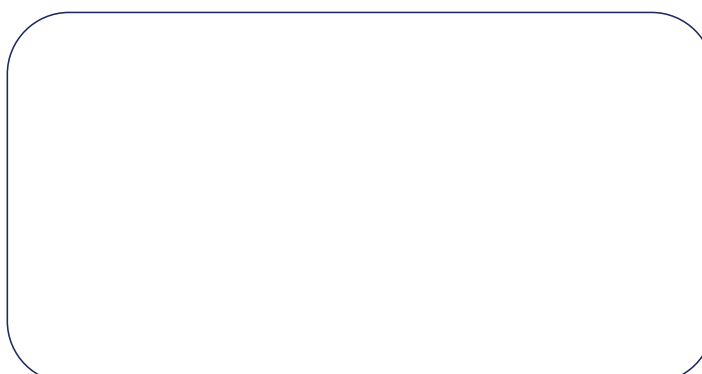


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges



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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF AUSTRIA

## Country profile

- Population (in millions) (year): 8,5 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 43 810 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	0.5% (2008) <sup>1</sup>
Blood donors (first time)	0.1 % (2008) <sup>d</sup>	0.06 % (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	-	47.1 % (2008) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	Yes (?)	No

## National plan

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>g,g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Contacts of hepatitis patients, occupational risk, chronic liver disease, travellers to an endemic region, residents close communities	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Infant	1997-ongoing
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver disease, multiple sex partners, IDU, household contacts HBsAg+ patient	

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2009) <sup>4</sup>
Hepatitis C	Yes (year ?) <sup>f</sup>
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	No
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	1100 (2011) <sup>1</sup>

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

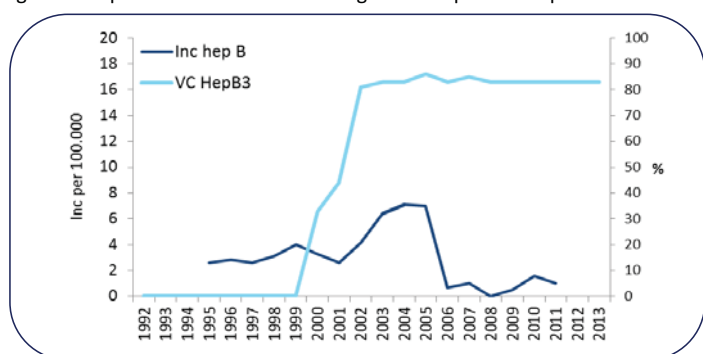
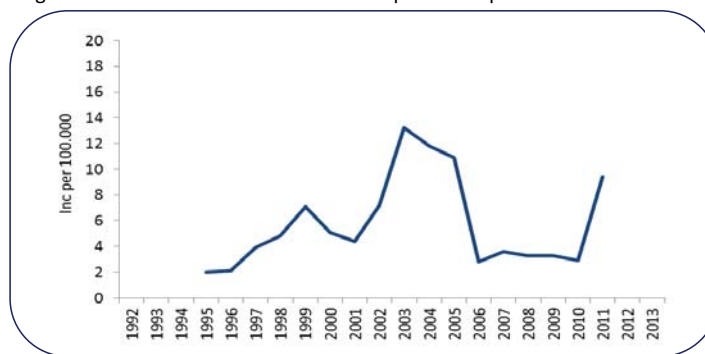


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF AZERBAIJAN



## Country profile

- Population (in millions) (year): 9,4 (2014)<sup>6</sup>
- Gross national income per capita (int \$) (year): 5 149 (2013)<sup>6</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population (adults)	3 % (2009) <sup>1</sup>	4 % (2004) <sup>1</sup>
Blood donors (first time)	2.2 % (2004) <sup>d</sup>	4.3 % (2004) <sup>d</sup>
Pregnant women	-	-
Risk groups		
IDU	5.9 % (2007-2008) <sup>2</sup>	53 % (2007-2008) <sup>2</sup>
Men having sex with men	4 % (2007-2008) <sup>2</sup>	14 % (2007-2008) <sup>2</sup>
Sex workers	3.3 % (2007-2008) <sup>2</sup>	9.3 % (2007-2008) <sup>2</sup>
STI patients	6.1 % (1998) <sup>3</sup>	5.7 % (1998) <sup>3</sup>

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1974-75)	Yes (1999)
Pregnant women	Yes (since 1989)	No
Injecting drug users	Yes (since 1989)	Yes (since 2000)
STI clinic patients	Yes (since 1989)	Yes (since 2000)
Haemodialysis patients	Yes (since 1989)	Yes (since 2000)
Health care workers	Yes (since 1989)	currently
Men having sex with men	Yes, only HIV positives (since 1997)	Yes, only HIV positives (since 2007)
Prison population	Yes, only HIV positives (since 2007)	
Migrants	Partial, only for long term visa	
Others	-	-

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	No		
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2001-ongoing
Catch-up	No		
Risk group	Yes	Medical workers	Only in 2014

## Treatment

National guidelines for clinicians available	
Diagnosis and treatment of chronic viral hepatitis (incl HepB) Hepatitis C	Yes, 2011 Yes, 2009
Drugs available for hepatitis C treatment <sup>**f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	-
Number of patients treated for hepatitis C	-

<sup>\*\*</sup>included on the national essential medicines list or subsidized by the government

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>5</sup>

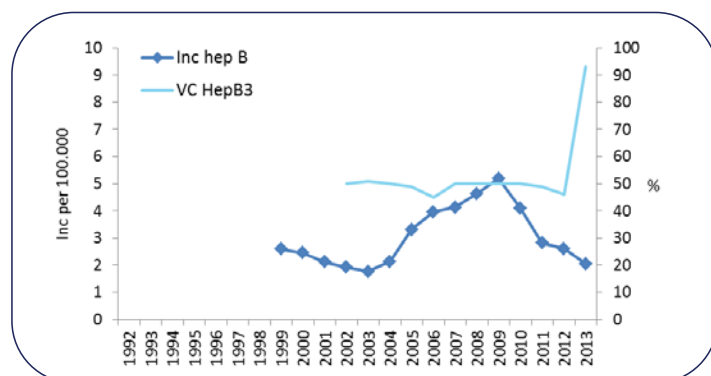
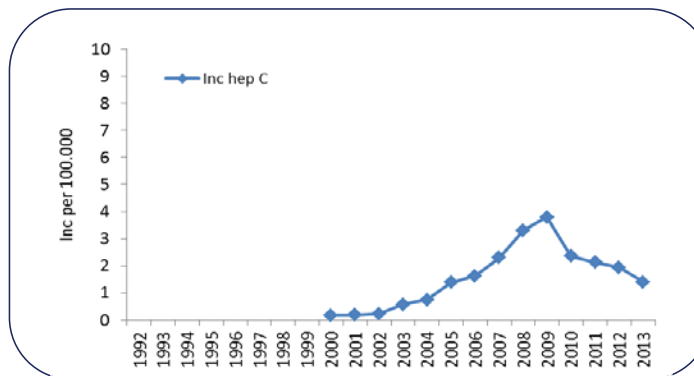


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

**Hep C treatment related medicines registered in Azerbaijan:**

- pegylated interferon, ribavirin, telaprevir, boceprevir.

**Hep C treatment related medicines currently under review by National Regulatory Authority :**

- simeprevir, sofosbuvir

**Up to 2014 expenses related to treatment of Hep C were covered by patients. In 2014 Ministry of Health has initiated procurement of interferon & ribavirin for treatment of Hep C from state budget; low-income population will be prioritized for access to care.**

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF BELARUS



## Country profile

- Population (in millions) (year): 9,6 (2011)<sup>f</sup>
- Gross national income per capita (in US\$) (year): 16 940 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population (adults)	4.8 % (2007?) <sup>1</sup>	1.3 % (2007?) <sup>1</sup>
Blood donors (first time)	-	-
Pregnant women	-	-
Risk groups		
IDU	13 % (2006) <sup>2</sup>	39 % (2006) <sup>2</sup>

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?) <sup>f</sup>	Yes (since year ?) <sup>f</sup>
Pregnant women	Yes (since 2009 ?) <sup>3</sup>	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A		Target	Since/Peri
Universal <sup>3</sup>	Yes	Children (6 y) in Minsk City only Children (18 m) in Minsk City only	2003-2008 2009-ongoing
Risk group	Yes	travelers, contact of peopl with HAV infection	2002-ongoing
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn Adolescent (13y)	1999-ongoing 1999-20012
Catch-up	No		
Risk group	Yes	Health-care workers, dialysis patients, household contact of people with HBV infection, medical student	2000-ongoing

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (year ?)
Hepatitis C	Yes (year ?)
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>1</sup> and impact on hepatitis B (acute and chronic incidence (info contact person)

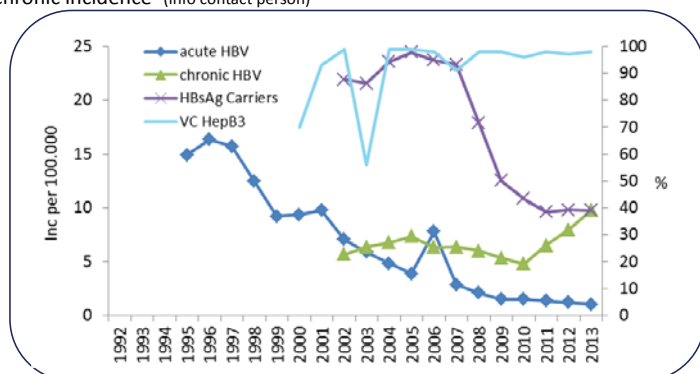
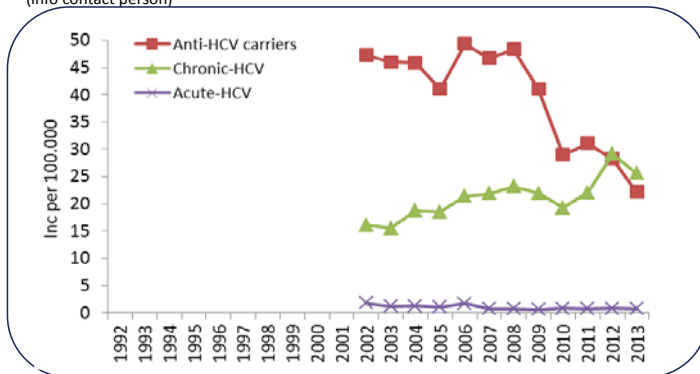


Figure 2: Introduction of activities and impact on hepatitis C incidence (info contact person)



## Specific issues and future challenges



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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF BELGIUM

## Country profile

- Population (in millions) (year): 11,2 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 40 280 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.7% (2003) <sup>c</sup>	0.1% (2003) <sup>c</sup>
Blood donors (first time)	0.08% (2008) <sup>d</sup>	0.04% (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups:		
Injecting drug users	2.7% (2007) <sup>d</sup>	55% (1995) <sup>1</sup>
Haemodialysis patients	-	6.8% (2000) <sup>2</sup>
Health care workers	-	0.4% (2000) <sup>3</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Not at national level	Yes
Injecting drug users	No	Yes (since year ?)
STI clinic patients	No	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	Yes (since year?)	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

There is a written action plan for hepatitis C (period 2014-2019) but no written national strategy for hepatitis B or viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>4,g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Contacts of hepatitis A patients, travellers, male homo- and bisexuals, liver patients, occupational risk, staff and residents in institutions for mentally disabled, people working in the food chain, contacts of a recently adopted child from an endemic country	2001
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Infant Adolescent (12y)	1999-ongoing 1999-2011
Catch-up	Yes	Adolescent (12-18y)	2012-ongoing
Risk group	Yes	Occupational risk; neonates born to HBsAg+ mothers, haemodialysis patients; chronic liver patients, STI patients, multiple sex partners, MSM, IDU, household contacts HBsAg+ patient; immunosuppressed patients, travellers to HBV endemic area	1988; 1991; 2002

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2007) <sup>5</sup>
Hepatitis C	Yes (2003, 2012) <sup>6</sup>
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	710 (2010) <sup>7</sup>

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

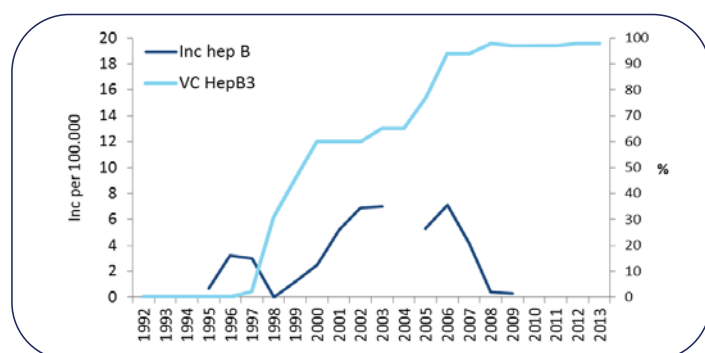
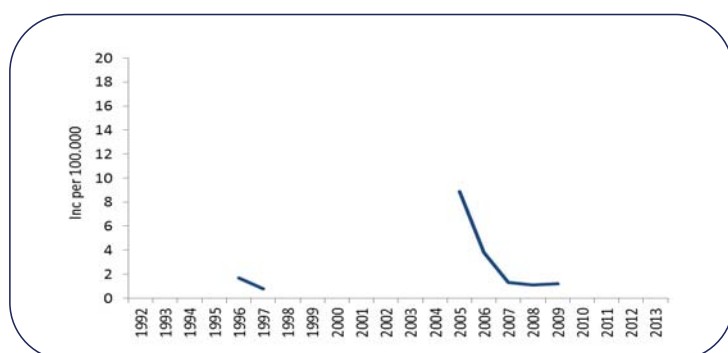


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF BOSNIA AND HERZEGOVINA

## Country profile

- Population (in millions) (year): 3,8 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 9820 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	2.8 % (2004) <sup>1</sup>
Blood donors (first time)	0.1 % (2006) <sup>d</sup>	0.03 % (2006) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	3.2 % (2009) <sup>2</sup>	50 % (2009) <sup>2</sup>
Men having sex with men	0 % (2008) <sup>2</sup>	11.5 % (2008) <sup>2</sup>
Sex workers	1.4 % (2008) <sup>2</sup>	4.3 % (2008) <sup>2</sup>
Haemodialysis patients	-	58.9 % (2005) <sup>3</sup>
Health care workers	-	0.4 % (2005) <sup>3</sup>
Family chronic carriers	12.1 % (2004-2006) <sup>4</sup>	-

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	?	?
Pregnant women	Yes (since 2009 ?) <sup>3</sup>	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2001-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2012) <sup>5</sup>
Hepatitis C	Yes (2012) <sup>5</sup>
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	120 (2006-2009) <sup>5</sup>
Number of patients treated for hepatitis C	462 (2005-2009) <sup>5</sup>

\*included on the national essential medicines list or subsidized by the government

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>e</sup>

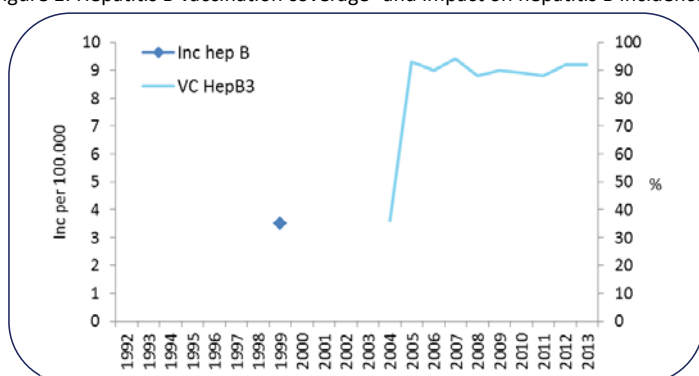
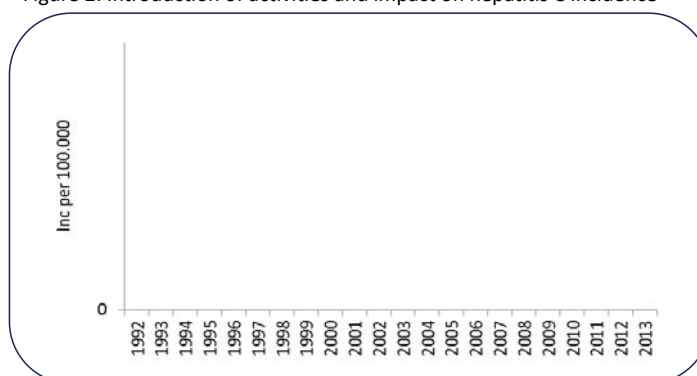


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

## References

### Country specific references

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF BULGARIA



## Country profile

- Population (in millions) (year): 7,2 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 15 200 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	3.9% (2011) <sup>1</sup>	0.7 % (2011) <sup>1</sup>
Blood donors (first time)	6.1% (2008) <sup>d</sup>	0.5% (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups:		
Injecting drug users	5.6% (2007) <sup>c</sup>	73.9% (2005) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 2007)	Yes (since 2007)
Pregnant women	No	No
Injecting drug users	Yes (since 2007)	Yes (since 2007)
STI clinic patients	No	No
Haemodialysis patients	Yes (since 2009)	Yes (since 2009)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

A written national plan that focuses exclusively on the prevention and control of viral hepatitis is in the process of elaboration.

## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	IDU, MSM, travellers, chronic liver disease, occupational risk, outbreak setting, residents close communities	2000
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Newborn	1991-ongoing
Catch-up	Yes	7-15 years	?
Risk group	Yes	Occupational risk, haemodialysis patients, chronic liver disease, STI patients, multiple sex partners, IDU, household contacts HBsAg+ patient, travellers; persons born < 1992, HIV patients, military and police staff	1995;  2000

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (since 1991)
Hepatitis C	Yes (since 1999)
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence<sup>3,k</sup>

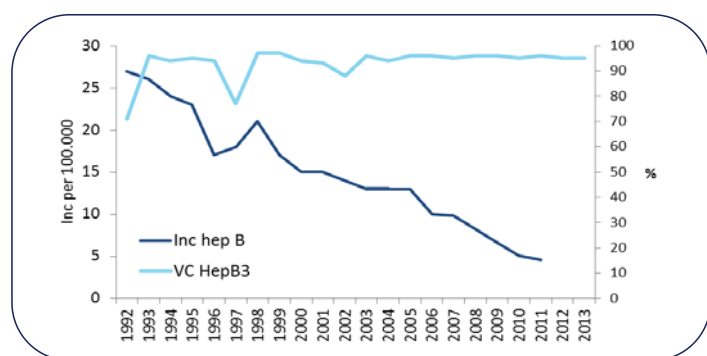
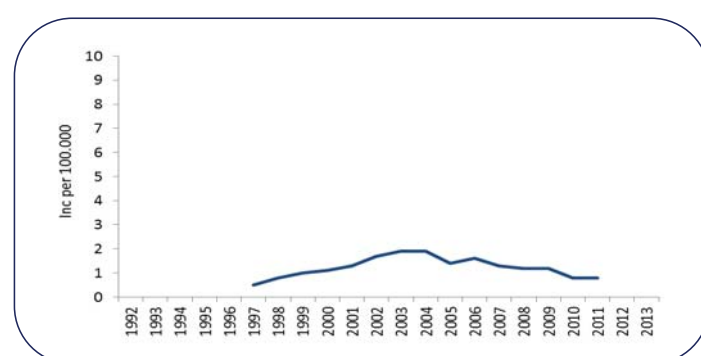


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>3,k</sup>



## Specific issues and future challenges

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF CROATIA



## Country profile

- Population (in millions) (year): 4,2 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 20 370 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.7% (2011) <sup>1</sup>	0.9 % (2011) <sup>1</sup>
Blood donors (first time)	0.1% (2013) <sup>2</sup>	0.15 % (2013) <sup>2</sup>
Pregnant women	0.13 (2013) <sup>2</sup>	1.3 (2011-2012) <sup>3</sup>
Risk groups:		
Injecting drug users	0.6% (2008) <sup>4</sup>	41% (2008) <sup>4</sup>
Multiple sex partners	-	6.3% (2003-2006) <sup>5</sup>
Men having sex with men	-	2.9% (2003-2006) <sup>5</sup>
Sex workers	-	4.0% (2003-2006) <sup>5</sup>
Prison population	11.3% (2005-2007) <sup>6</sup>	8.3% (2005-2007) <sup>6</sup>

## Screening

Recommended for following groups:	Hep B (since early 1980)	Hep C (since early 1990)
Blood and organ donors (mandatory)	Yes	Yes
Pregnant women (mandatory)	Yes (since 1999)	Yes (since 1999)
Injecting drug users	Yes	Yes
STI clinic patients	Yes	Yes
Haemodialysis patients	Yes	Yes
Health care workers	Yes	Yes
Men having sex with men	Yes	Yes
Prison population	Yes	Yes
Migrants		
Others		

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers to endemic countries, contacts of hepatitis A patients	
Hepatitis B <sup>h</sup>			
Universal	Yes	Infant Adolescent (12-13y)	2007-ongoing 1999-ongoing
Catch-up	No		
Risk group	Yes	Occupational risk, IDU, STI patients, haemodialysis patients, HCW, MSM	

## Treatment\*\*

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (2005,2009,2013)
Hepatitis C	Yes (2005,2009,2013)
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	250/yearly
Number of patients treated for hepatitis C	300/yearly

\*included on the national essential medicines list or subsidized by the government

\*\* data on treatment confirmed by Dr. Adriana Vince, MD PhD

Professor of Infectology, Zagreb University School of Medicine, Zagreb, Croatia

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup> But during a croatian consensus conference in february 2013 algorithm for patient diagnostic follow up, treatment of chronic hepatitis C (genotypes 1-6) and hepatitis B, treatment of special populations (children, dialysis patients, transplanted patients, individuals with HIV/HCV co-infection), and therapy side effects were discussed<sup>7</sup>.

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>2,j,k</sup>

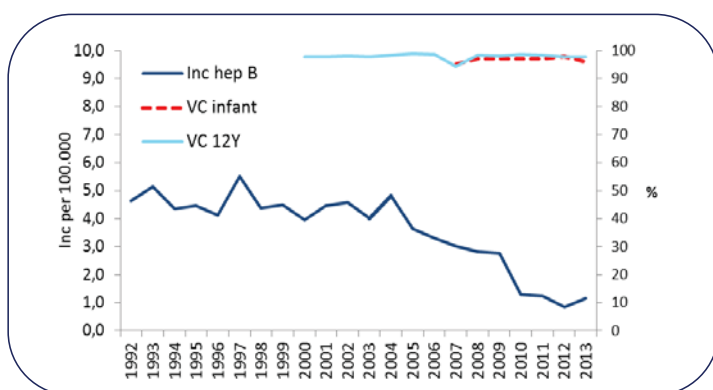
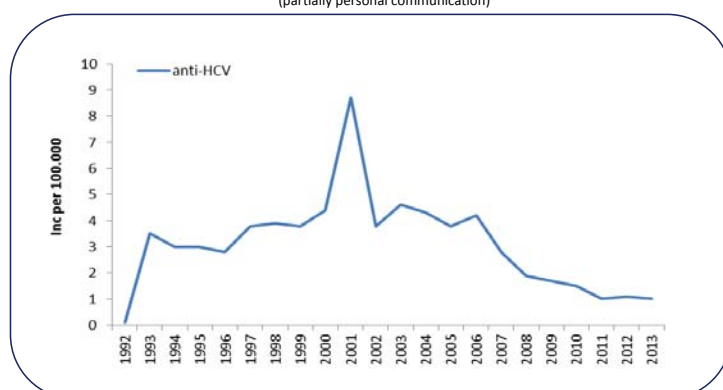


Figure 2: Hepatitis C incidence<sup>2,j,k</sup> (partially personal communication)



## Specific issues and future challenges

Country contact:

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF CYPRUS

## Country profile

- Population (year): 858 000 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 29 570 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.9% (2006) <sup>c</sup>	-
Blood donors (first time)	0.4% (2008) <sup>d</sup>	0.06 % (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups:		
Injecting drug users	7.8% (2007) <sup>c</sup>	50% (2008) <sup>1</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	Yes (since year ?)	Yes (since year ?)
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	Yes (since year ?)	Yes (since year ?)
Migrants	No	No
Others	Long-term healthcare facilities (since ?)	No

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Infant	1990-ongoing
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver disease, STI patients, multiple sex partners, IDU, household contacts HBsAg+ patient	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (year ?)
Hepatitis C	Yes (year ?)
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: ( <i>specify</i> )	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

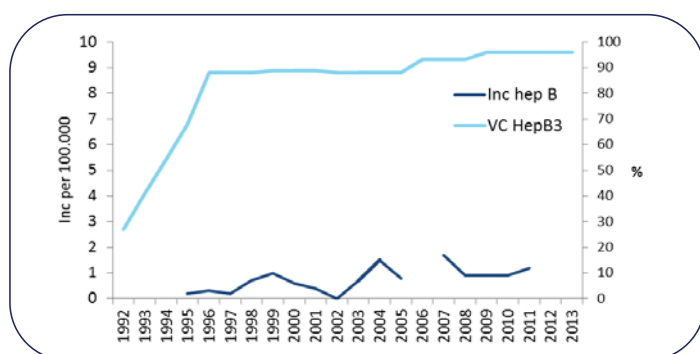
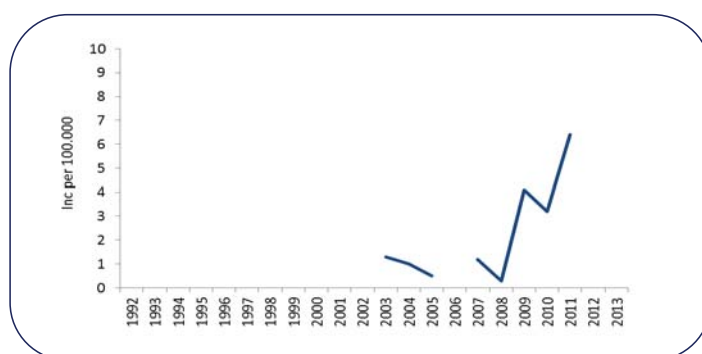


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF CZECH REPUBLIC



## Country profile

- Population (in millions) (year): 10,5 (2014)
- Gross national income per capita (int \$) (year): 25 530 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.6% (2001) <sup>c</sup>	0.2% (2001) <sup>c</sup>
Blood donors (first time)	0.05% (2008) <sup>d</sup>	0.13 % (2008) <sup>d</sup>
Pregnant women	0,2% (MoH)	-
Risk groups		
Injecting drug users	-	35% (2005) <sup>1</sup>
Homeless people	26.5% (2005) <sup>2</sup>	26.5% (2005) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes, since 1973	Yes, since year 1992
Pregnant women	Yes, since 1987	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes	Yes ,since year 1992
Health care workers	Yes, since 1983	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Contacts of hepatitis patients, travellers to an endemic region, employees at risk	Since 1995
Hepatitis B <sup>g,h</sup>			
Universal	Yes	Infant, adolescents	2001-ongoing
Catch-up	No		
Risk group	Yes	Occupational risk; dialysis patients; neonates born to HBsAg+ mothers; household contacts HBsAg+ patient;	1983; 1985; 1987; 1990; 1995

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2007) <sup>3</sup>
Hepatitis C	Yes (2007) <sup>4</sup>
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	880 (2010) <sup>4</sup>

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>e</sup> and impact on hepatitis B incidence <sup>f,g</sup>

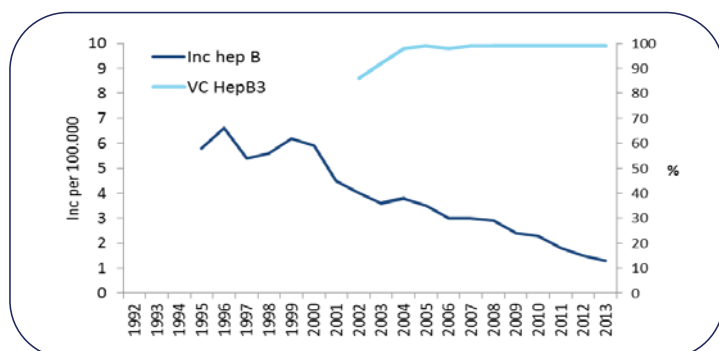
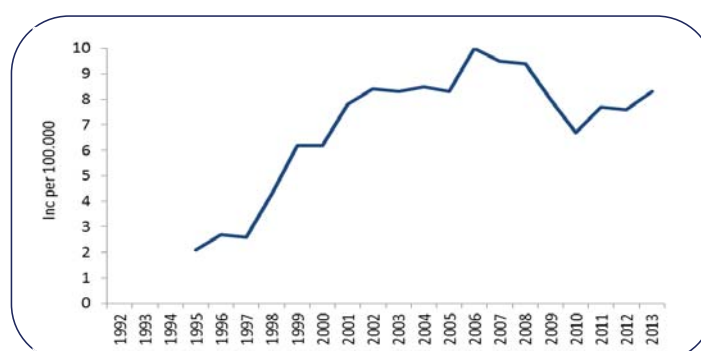


Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>f,g</sup>



## Specific issues and future challenges

In the future, all infants and only unvaccinated adolescents (12 years old) will be vaccinated against HB. The whole population till 23-24 years is fully vaccinated. The vaccination of risk groups continues.

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF DENMARK

## Country profile

- Population (in millions) (year): 5,6 (2014)
- Gross national income per capita (int \$) (year): 44 440 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.1 % (1994-1995) <sup>c</sup>	-
Blood donors (first time)	0.04 % (2008) <sup>d</sup>	0.01 % (2008) <sup>d</sup>
Pregnant women	0.3 % (2005-2006) <sup>c</sup>	-
Risk groups		
Injecting drug users	0.9 % (2007) <sup>1</sup>	66.8 % (2007) <sup>1</sup>
Prison population	4.3 % (1996-1997) <sup>2</sup>	4.3 % (1996-1997) <sup>2</sup>
Health care workers	0.07 % (1998) <sup>3</sup>	0.1 % (1998) <sup>3</sup>
Immigrants Greenland	4.4 % (2011) <sup>4</sup>	1.5 % (2011) <sup>4</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes	No
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	No	No
Haemodialysis patients	No	No
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.<sup>f</sup>

## Impact

Figure 1: Introduction of activities and impact on hepatitis B incidence <sup>j,k</sup>

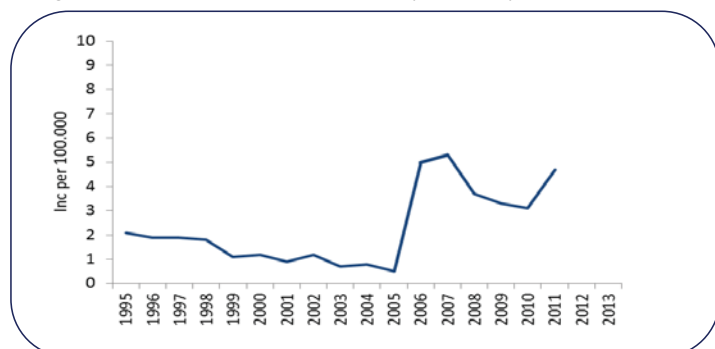
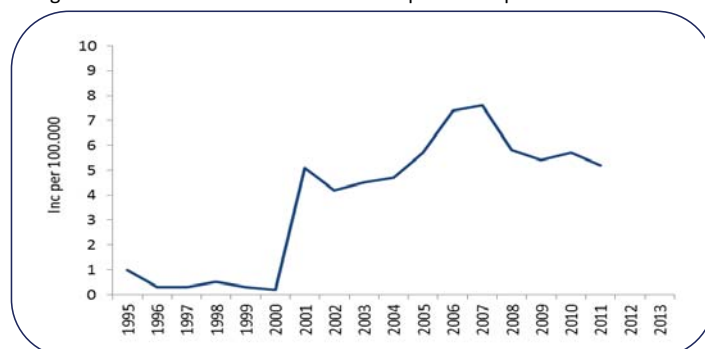


Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Occupational risk, travellers to an endemic region	
Hepatitis B <sup>e,h</sup>			
Universal	No		
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver patients, IDU, (household) contacts HBsAg+ patient, MSM in Copenhagen municipality	

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2011) <sup>5</sup>
Hepatitis C	Yes (2011) <sup>5</sup>
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	105 (2011) <sup>6</sup>

\*included on the national essential medicines list or subsidized by the government

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ESTONIA



## Country profile

- Population (in millions) (year): 1,3 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 24 230 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0.2 % (2008) <sup>d</sup>	0.7 % (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	21.3 % (2004) <sup>1</sup>	96.2 % (2004) <sup>1</sup>
Health care workers	-	5 % (1998) <sup>2</sup>
Haemodialysis patients	-	10.7 % (1998) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1978) *	Yes (since 1994) *
Pregnant women	Yes (since 1996) *	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	No	No
Health care workers	No	No
MSM	No	No
Prison population	Yes (since 2013) **	Yes (since 2013) **
Migrants	No	No
Others	No	No

\*Data source: North Estonia Medical Centre, Blood Center

\*\* Data source: Prisons Department of the Ministry of Justice

## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Contacts of hepatitis patients, occupational risk, travellers to an endemic region	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Newborn Adolescent (12y)	2003-ongoing 1999-ongoing
Catch-up	No		
Risk group	Yes	Occupational risk	1996

## Treatment

National guidelines for clinicians available <sup>f</sup>	Yes (since 2013)
Hepatitis B	Yes (since 2002, changes made in 2006, 2007, 2010 and 2012)
Hepatitis C	Yes (since 2002, changes made in 2006, 2007, 2010 and 2012)
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	276 (2013) †
Number of patients treated for hepatitis C	2049 (2013) †

\*included on the national essential medicines list or subsidized by the government

\*\* Data source : West-Tallinn Central Hospital, Infectious Diseases Clinic

† Data source : Estonian Insurance Fund

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

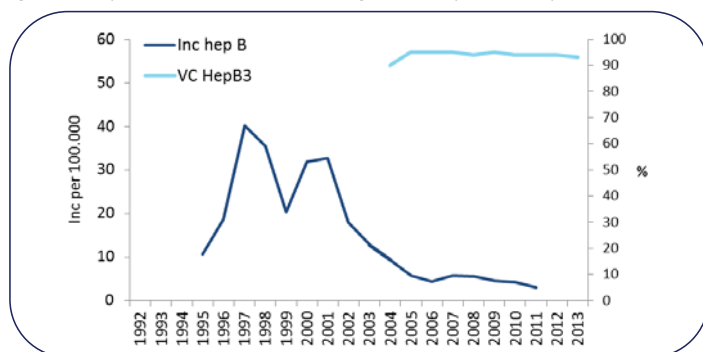
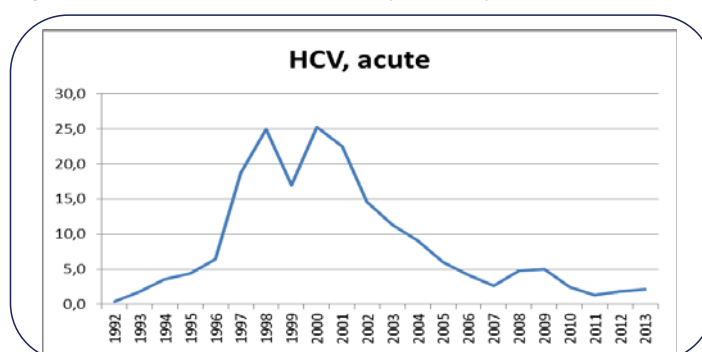


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



† Data source : Estonian Insurance Fund

## Specific issues and future challenges

**Vaccination programmes:** HepB vaccination of newborns and adolescents (12 years old) is ongoing in 2014. From 2015 - continue vaccination of newborns and children, who was not vaccinated earlier. (source: Estonian Health Board)

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF FINLAND



## Country profile

- Population (in millions) (year): 5,5 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 38 480 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.2 % (1997-1998) <sup>c</sup>	-
Blood donors (first time)	0.01 % (2008) <sup>d</sup>	0.06 % (2008) <sup>d</sup>
Pregnant women	0.1 % (2006) <sup>e</sup>	-
Risk groups		
Injecting drug users	aprx 5 % (2012) <sup>3</sup>	21.1 % (2007) <sup>1</sup>
Prison population	0.5% <sup>2</sup> - 8% <sup>3</sup> (2006)	45.8 % (2006) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1972* )	Yes (since year ?)
Pregnant women	Yes (since 1994 <sup>4</sup> )	No
Injecting drug users**	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes (since 2011)***	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population**	No	No
Migrants****	No	No
Others	Yes	No

\* blood donors (Source: The Finnish Red Cross Blood Service)

\*\* test offering at needle-exchange test sites and prisons

\*\*\* The Hospital District of Helsinki and Uusimaa

\*\*\*\* voluntary screening for refugees and asylum seekers from countries > 2 % HBsAg + (ref. Reports of the Ministry of Social Affairs and Health 2009:21. Prevention of infection problems among refugees and asylum seekers [in Finnish].)

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Introduction of activities and impact on hepatitis B incidence<sup>j,k,l</sup>

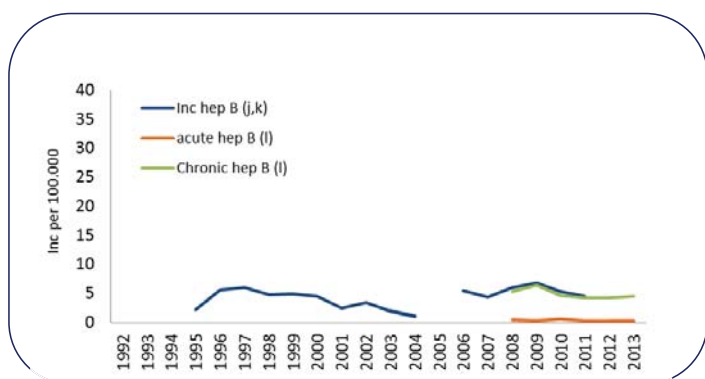
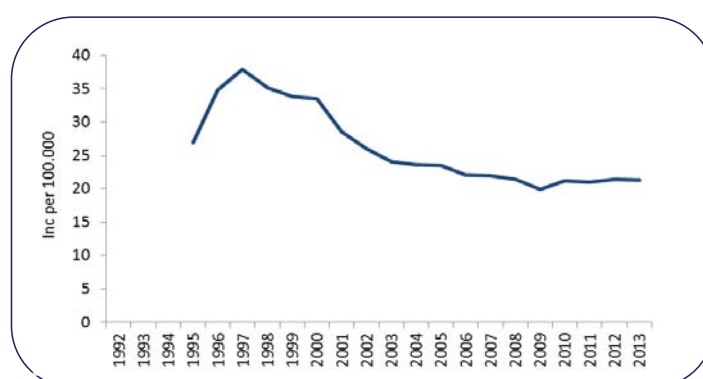


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k,l</sup>



## Specific issues and future challenges

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes <sup>2</sup>	Patients with hemorrhagic disease requiring regular treatment, IDUs and their close contacts (family members, co-habitants, sex partners) <sup>1</sup>	2005
Hepatitis B <sup>e</sup>			
Universal	No		
Catch-up	No		
Risk group	Yes	As of 2014: Risk groups as above and neonates of HBsAg+ mothers and fathers, co-habitants and sex partners of acute or chronic cases, healthcare trainees abroad with occupational risk, sex workers, persons without occupational needle-stick injury or blood contamination <sup>1</sup>	First started 1993

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes
Hepatitis C	Yes
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	Under evaluation
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF FRANCE



## Country profile

- Population (in millions) (year): 65,8 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 37 580 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.7 % (2004) <sup>1</sup>	0.8 % (2004) <sup>1</sup>
Blood donors (first time)	0.07 % (2012) <sup>5</sup>	0.03 % (2012) <sup>5</sup>
Pregnant women	0.8% (2011) <sup>8</sup>	-
Risk groups		
Injecting drug users	1.9 % (2004) <sup>1</sup>	44 % (2011) <sup>2</sup>
Prison population	-	4.8 % (2010) <sup>3</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors (mandatory)	Yes (1971)	Yes (1990)
Pregnant women	mandatory (1992)	Yes (2014)
Injecting drug users	No	Yes (1996)
STI clinic patients	Yes (1996)	Yes (1996)
Haemodialysis patients	Yes (1996)	Yes (1996)
Health care workers	No, except in case of accidental blood exp.	No, except in case of accidental blood exp.
Men having sex with men	No	No
Prison population	Yes (2001)	Yes (2001)
Migrants	Yes (2001)	Yes (2001)
Others	Household contacts of HBV carriers (1996)	Yes (HIV-infected MSM in 2006-2007)

## National plan

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>4</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Occupational risk, travellers to an endemic region, children resident in institutions, chronic liver patients, MSM, children > 1 year with at least one family member born in an endemic country, cystic fibrosis	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Infant Adolescent (11-13y)	1995-ongoing 1994-1998
Catch-up	Yes	1-15y	1999-ongoing
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, multiplesex partners, IDU, household contacts HBsAg+ patient, prisoners, travellers, resident in psychiatric institution	1992-ongoing

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2014) <sup>5</sup>
Hepatitis C	Yes (2014) <sup>5</sup>
Drugs available for hepatitis C treatment <sup>*.f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	Yes
Sofosbuvir	Yes
Others: <i>Daclatasvir</i>	Yes
Number of patients treated for hepatitis B	1000 new Tx /y. 18000 in 2014
Number of patients treated for hepatitis C	14000(2014) <sup>6</sup>

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>l</sup> and impact on hepatitis B incidence<sup>j,k,7</sup>

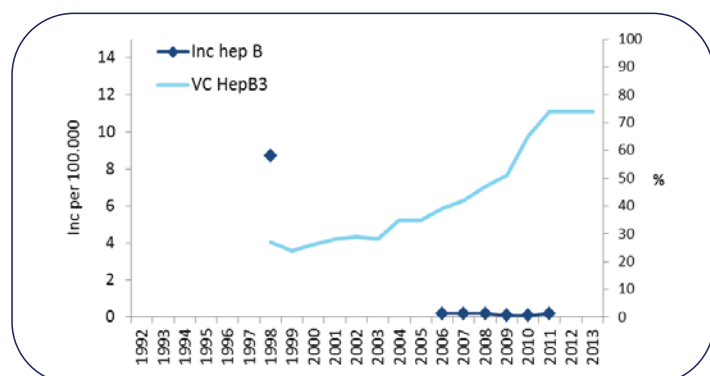
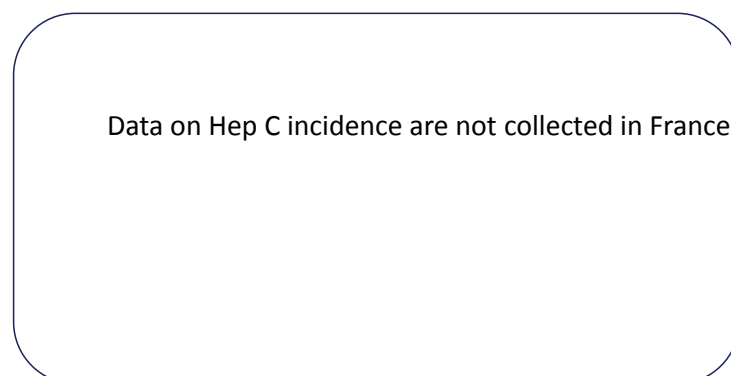


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

- The recommendation to screen all male adults aged 18-60 y.o. (HBV and HCV), never tested before, has been recently added to the strategy targeted on risk factors. Has to be implemented and evaluated.
- In the next ten years, the challenge will be to be able to treat a maximum of patients with DAAs interferon-free regimens thus leading to a dramatic reduction of HCV epidemics.

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF GEORGIA



## Country profile

- Population (in millions) (year): 4,3 (2011)
- Gross national income per capita (int \$) (year): 7040 (2013)
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population (adults)	-	6.7 % (2007) <sup>1</sup>
Blood donors (first time)	1,36% (2013)	1,65 % (2008)
Pregnant women	2,5% (2013)	-
Risk groups		
IDU	2.6 % (2007) <sup>1</sup>	68.8 % (2000-2001) <sup>1</sup>
Men having sex with men	10 % (2007) <sup>1</sup>	16 % (2007) <sup>1</sup>
HIV positive	6.1 % (2013)	31,2 % (2013)

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1997)	Yes (since 1997)
Pregnant women	Yes (since 2007)	No
Injecting drug users	No	Yes (since 2008)
STI clinic patients	No	No
Haemodialysis patients	No	No
Health care workers	No	No
Men having sex with men	No	No
Prison population	Yes (since March, 2014)	Yes (since March, 2014)
Migrants	No	No
Others	No	No

## National plan

The Comprehensive Multi-Year Plan 2012-2016 includes all activities related to the Prevention and Control of Hepatitis B.

The National Center for Disease Control and Public Health is currently working on elaboration of the National Strategic Plan on prevention and control of Hepatitis C.

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	No		
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2000-ongoing
Catch-up	No		
Risk group	Yes	HCWs	2010-2012

## Treatment

National guidelines for clinicians available <sup>f</sup>	Yes (2013)
Hepatitis B	Yes (2008)
Hepatitis C	
Drugs available for hepatitis C treatment	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sophosbuvir	Yes
Others: (specify)	No
Number of patients treated for hepatitis B	See extra comments *
Number of patients treated for hepatitis C	

\*Treatment of Hep C:

Currently, treatment available for HCV in the country is the combination of Pegylated Interferon and Ribavirin. The following groups receive this treatment regimen:

- HIV/HCV co- infected patients – 150 per year (funded by the Global Fund (GF) Projects)
- HCV infected patients at the penitentiary system – about 300 this year (funded by the Government of Georgia)

In 2014, additional 700 patients are involved in the "discount program", that allows them to get medication at 60% discount.

Prior to initiation of the above programs, approximately 150-200 patients received the HCV treatment in the Private sector per year.

As to the treatment with Sofosbuvir that costs USD 70/80,000, only around 10-12 patients are receiving it in the country.

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>l</sup> and impact on hepatitis B incidence

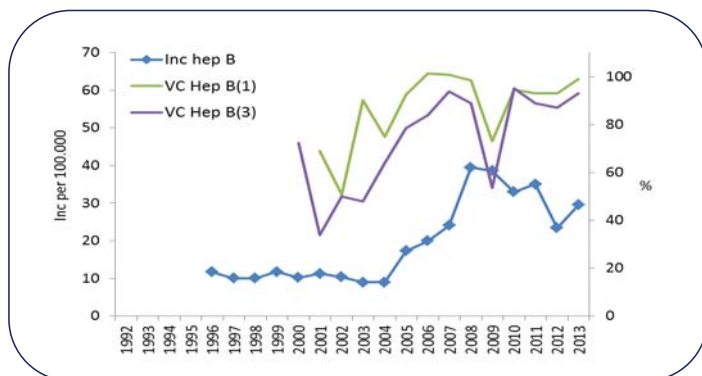
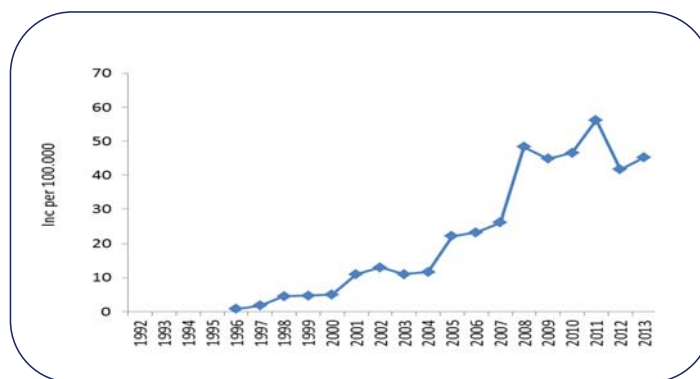


Figure 2: Incidence of Hepatitis C, Georgia, 1996-2013



## Specific issues and future challenges

Special Note: In order to have accurate information regarding the spread of Hepatitis in the country, the Georgian Government decided to conduct the population-based survey to estimate the prevalence of HCV/HBV infections in the general population of Georgia and identify factors associated with transmission, perceptions of the population towards hepatitis, its prevention and treatment, and describe the circulating genotypes in the different population sub-groups. The sample size will be approximately 7000 households.

The above survey, as well as the detailed protocol have been developed in close cooperation with US CDC.

It would be very important to establish the close collaboration with other International organizations that could be able to contribute to this very significant initiative.

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF GERMANY



## Country profile

- Population (in millions) (year): 80,8 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 44 540 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.3 % (2008-2011) <sup>1</sup>	0.3 % (2008-2011) <sup>1</sup>
Blood donors (first time)	0.10 % (2012) <sup>6</sup>	0.076% (2012) <sup>d</sup>
Pregnant women – (limitation one hospital see ref)	1.6 % (1996-2005) <sup>7</sup>	0.9% (1992-1996) <sup>8</sup>
Risk groups		
Injecting drug users	2 % (1999) <sup>c</sup>	31-73% % (2011-2014) <sup>9</sup>
Prison population	2,2%(2006-2007) <sup>9</sup>	20,6 % (2006-2007) <sup>9</sup>
Immigrants	3.6 % (2010-2012) <sup>2</sup>	1.9 % (2010-2012) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users*	Yes (since year ?)	Yes (since year ?)
STI clinic patients*	Yes (since year ?)	Yes (since year ?)
Haemodialysis patients*	Yes (since year ?)	Yes (since year ?)
Health care workers*	Yes (since year ?)	Yes (since year ?)
Men having sex with men*	No	No
Prison population*	Yes (since year ?)	Yes (since year ?)
Immigrants	No	No
Others	Multiple sex partners, HIV positives, occupational risk	Multiple sex partners, HIV positives, occupational risk

\*There are clinical recommendations in place, but no screening strategy implemented by law.

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>3,g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Occupational risk, MSM, day care center staff, residents in psychiatric institutions; contacts hep A patient; chronic liver disease; travellers to an endemic region, persons frequently receiving blood components	1993; 1995; 1997;
<b>Hepatitis B<sup>e,h</sup></b>			
Universal	Yes	Infant	1995-ongoing
Catch-up	Yes	Initially 13-17y, later 9-17y Since 2011: All unvaccinated children 15m-17y	1995 - ongoing
Risk group	Yes	Newborns to HBsAg+ mothers, Occupational risk, immunosuppressed patients, sexual risk, IDU, contacts HBsAg+ patient, prisoners, travellers, residents in psychiatric institution. Hepatitis C patients, patients on haemodialysis	

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2007) <sup>4</sup>
Hepatitis C	Clinical recommendation in place since 2004 <sup>10</sup>
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	12 700 (2011) <sup>5</sup>

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

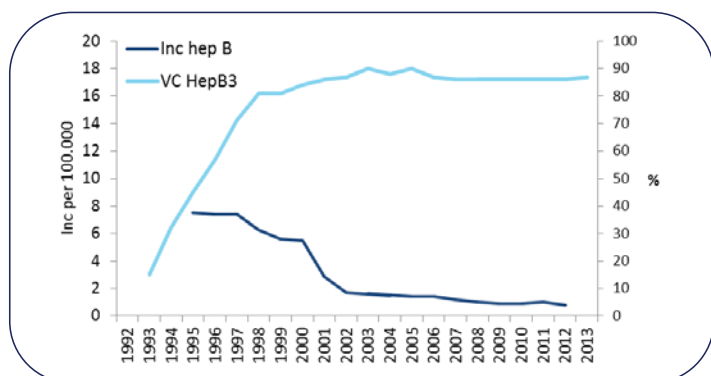
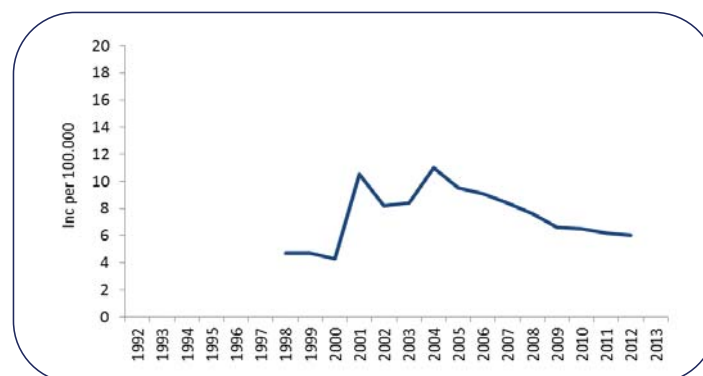


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

A comprehensive situation analysis on incidence, prevalence, morbidity, mortality, burden and costs of hepatitis B and C for each risk group will be performed by the national public health institute in the coming 12 months.

Future challenges are to link groups at increased risk like PWID, prisoners and migrants to diagnosis, treatment and care. These groups also need to be better reached by vaccination programmes against hepatitis A/B. Further, special attention is needed for the high hepatitis C incidence among HIV positive MSM.

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF GREECE



## Country profile

- Population (in millions) (year): 11 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 25 630 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	2.3 % (2014) <sup>5,6</sup>	1,9 (2014) <sup>5,6</sup>
Blood donors (first time)	1.4 % (2008) <sup>d</sup>	0.4 % (2008) <sup>d</sup>
Pregnant women	2.9 % (2003) <sup>c</sup>	0.8% (1994-2002) <sup>c</sup>
Risk groups		
Injecting drug users	1.1 – 3.8 % (2011) <sup>8</sup>	62.4 - 79 % (2011) <sup>8</sup>
Refugees	15.4 % (2002) <sup>3</sup>	2.3% (2002) <sup>3</sup>
Haemodialysis patients	5.5 % (2010) <sup>4</sup>	11-38% (2005) <sup>7</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1975)	Yes (1992)
Pregnant women	Yes (1998) <sup>9</sup>	No
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	Yes (2000)	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

No information available .

## Vaccination programs

Hepatitis A <sup>e</sup>	Yes	Target	Since/Period
Universal	Yes	Children >1 year	2008
Risk group	Yes	Contacts of hepatitis A patients, Travelers in countries with high and intermediate endemicity of Hepatitis A, homosexuals, drug users health professionals, professionals with processing / handling food, closed communities, cleaning staff of public and private educational institutions, persons who are looking after an adopted child from a country with high endemicity during the first 60 days of arrival in the country, persons with chronic liver disease or those receiving coagulation factors	
Hepatitis B <sup>g,e,h</sup>			
Universal	Yes	Infant	1998-ongoing
Catch-up	Yes		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver disease, STI patients, MSM, IDU, contacts HBsAg+ patient, travellers to median and high endemicity countries	1998

## Treatment

National guidelines for clinicians available	
Hepatitis B	2013
Hepatitis C	2014
Drugs available for hepatitis C treatment	
Ribavirin	1998
Pegylated interferon	2001
Interferon alpha	2003
Telaprevir	2012
Boceprevir	2012
Simeprevir	2014 (in individual bases)
Sofosbuvir	2014 (in individual bases)
Others: (specify)	
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

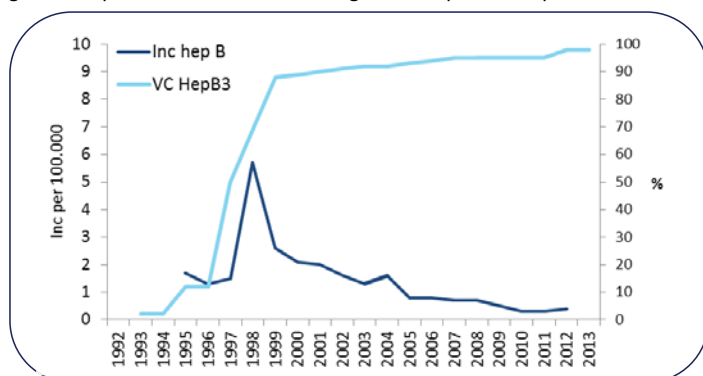
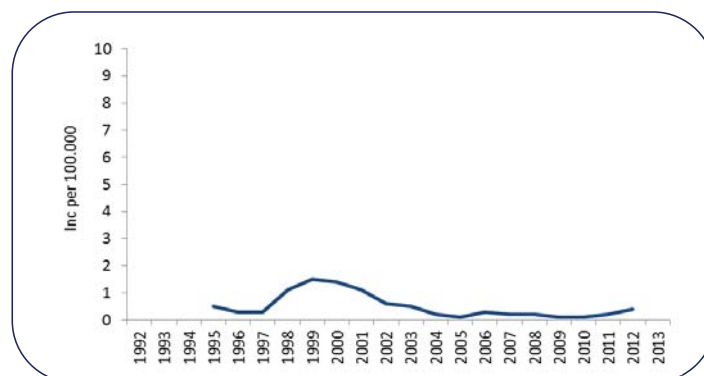


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>i,k</sup>



## Specific issues and future challenges

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF HUNGARY



## Country profile

- Population (in millions) (year): 9,9 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 20 930 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0.3% (2008) <sup>d</sup>	0.3% (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	0.4% (2007) <sup>c</sup>	22.6 % (2008) <sup>1</sup>
Prisoners	1.5% (2007-2009) <sup>1</sup>	4.9% (2007-2009) <sup>2</sup>
Migrants (Roma)	-	23.4% (2004) <sup>c</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1966)	Yes ( since 1992)
Pregnant women	Yes (since 1995)	No
Injecting drug users	Yes (2005)	Yes (since 2005)
STI clinic patients	No	No
Haemodialysis patients	Yes	No
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	Occupational risk	Occupational risk

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	close contacts of Hepatitis A patients ( free of charge) Travellers to an endemic region; chronic liver disease; outbreak areas, residents close communities; IDU	2009  1997; 1998; 1999
Hepatitis <sup>g,h</sup>			
Universal	Yes	Adolescent (14y)	1999-ongoing
Catch-up	No		
Risk group	Yes	Haemodialysis patients, occupational risk; neonates born to HBsAg+ mothers; contacts HBsAg+ patient; Medical school student	1986;  1995; 1996; 1996

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2014) <sup>3</sup>
Hepatitis C	Yes (2014) <sup>4</sup>
Drugs available for hepatitis C treatment <sup>4</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	Yes
Others: (specify)	
Number of patients treated for hepatitis B	
Number of patients treated for hepatitis C	

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on acute hepatitis B incidence<sup>j,k</sup>

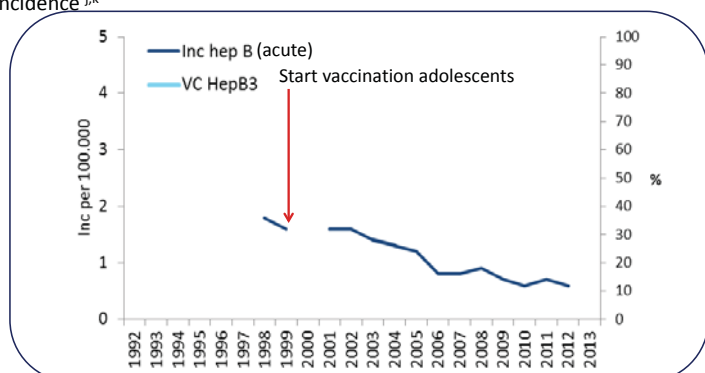
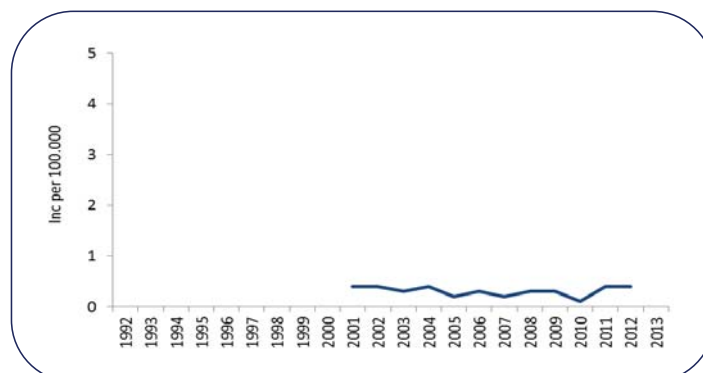


Figure 2: Introduction of activities and impact on acute hepatitis C incidence<sup>j,k</sup>



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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ICELAND



## Country profile

- Population (year): 325 671 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 38 870 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	?-	0.5%-estimate*
Blood donors (first time)	0.06% (2008) <sup>d</sup>	0% (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Migrants (outside EEA)	2.8% (2000-2002) <sup>1</sup>	0.8% (2000-2002) <sup>1</sup>

\* Personal communication of country contact

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes	Yes (since?)
Pregnant women	Yes (2001)	No
Injecting drug users	Yes (since year ?)	Yes (since ?)
STI clinic patients	No	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	Yes, from non EUS countries	No
Others	No	No

## National plan

No information available.

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify Certain travellers to endemic areas	?
Hepatitis B <sup>e,h</sup>			
Universal	No		
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, contacts HBsAg+ patient	

## Treatment

National guidelines for clinicians available	
Hepatitis B	No (year ?)
Hepatitis C	Yes (1999)
Drugs available for hepatitis C treatment	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	
Number of patients treated for hepatitis B	Yearly or total?
Number of patients treated for hepatitis C	Yearly or total?

## Impact

Figure 1: Introduction of activities and impact on hepatitis B incidence <sup>i,k</sup>

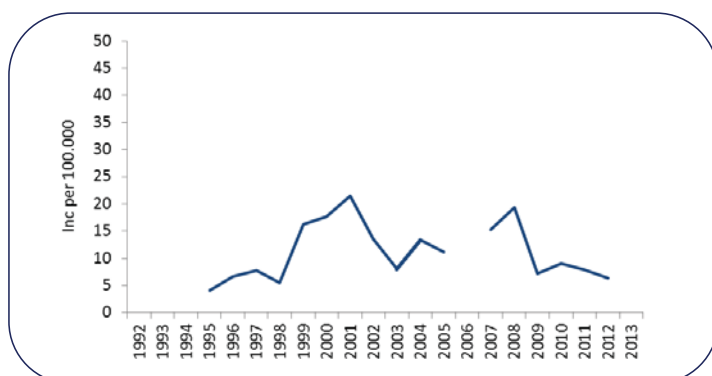
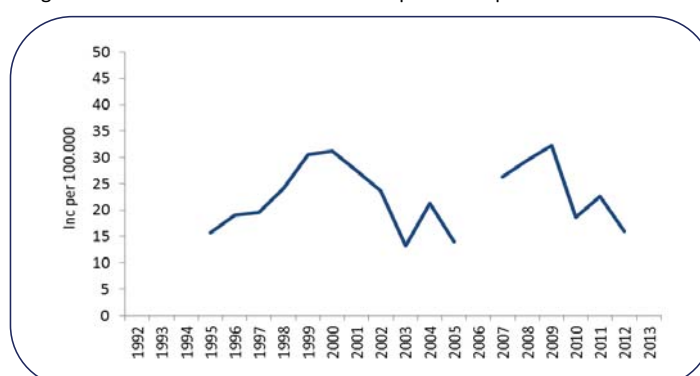


Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>i,k</sup>



## Specific issues and future challenges

Poster need still some validation work by the Centre for Health Security and Communicable Disease Control

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF IRELAND



## Country profile

- Population (in millions) (year): 4,6 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 44 540 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.1 % (2003) <sup>c</sup>	0,5 -1,2% (2012) <sup>5</sup>
Blood donors (first time)	0.03 % (2013) <sup>*</sup>	0.04 % (2013) <sup>*</sup>
Pregnant women	0.4 % (1998-2000) <sup>c</sup>	0,7% (2007) <sup>6</sup> 0,9%(2007-2008) <sup>7</sup>
Risk groups		
Drug users	4.2 % (2002) <sup>1</sup>	69% (2002) <sup>1</sup>
Prison population	HsAg 0,3 % (2011) <sup>8</sup>	13% (2011) <sup>8</sup>

<sup>\*</sup>personal communication, Irish Blood Transfusion Service, 2014

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1973)	Yes (since 1991)
Pregnant women	Yes (since ?)	No
Injecting drug users	Yes (since ?)	Yes (since ?)
STI clinic patients	Yes (since ?)	On clinical assessment
Haemodialysis patients	Yes (since ?)	Yes (since ?)
Health care workers	Yes (since ?)	*
Men having sex with men	On clinical assessment	On clinical assessment
Prison population	Yes (since ?)	Yes (since ?)
Migrants	Based on risk assessment	Based on risk assessment
Others	Multiple sex partners, long-term healthcare facilities	*HCW new entrant who will perform exposure prone procedures

## National plan

There is a national Hepatitis C Strategy 2011-2014

<http://www.hse.ie/eng/services/Publications/HealthProtection/HepCStrategy.html>

## Vaccination programs

Hepatitis A <sup>3</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, chronic liver disease, liver transplant recipients, haemophilia patients, IDU, MSM, clients and carers of learning disability services, occupational risk, (household) contacts of adopted children arriving from endemic countries	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Infant	2008-ongoing
Catch-up	No		
Risk group	Yes	Occupational risk, neonates born to HBsAg+ mothers, contacts HBsAg+ patient, IDU and their partners/children, haemodialysis patients, chronic liver patients, immunocompromised, those attending centres for learning disability, STI patients, multiple sex partners, prisoners, immigrants from endemic countries, homeless people, travellers.	

## Treatment

National guidelines for clinicians available	
Hepatitis B	No
Hepatitis C	Yes (2011-2014) <sup>4</sup>
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	-
Sofosbuvir	-
Others: (specify)	-
Number of patients treated for hepatitis B	-
Number of patients treated for hepatitis C	-

<sup>\*</sup>included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>1</sup> and impact on hepatitis B incidence <sup>j,k</sup>

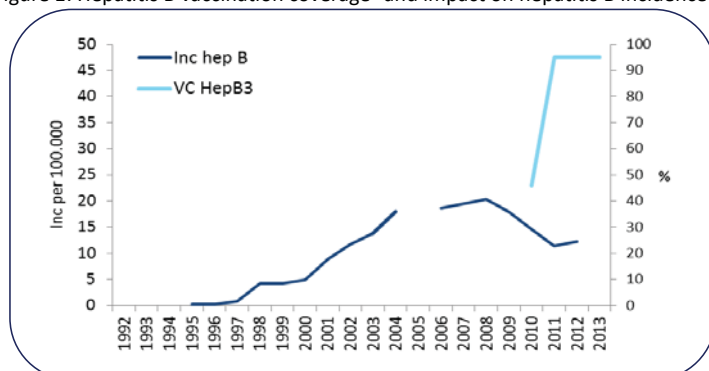
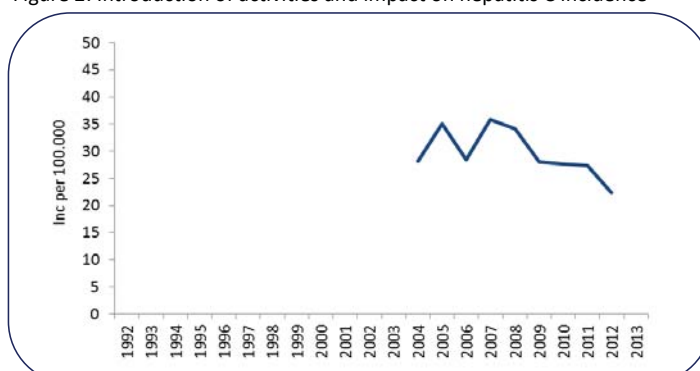


Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>j,k</sup>



## Specific issues and future challenges

Screening guidelines for hepatitis C are being developed.

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ISRAEL



## Country profile

- Population (in millions) (year): 7,6 (2011)<sup>f</sup>
- Gross national income per capita (int \$) (year): 32 140 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	1.75 % (2001-2010) <sup>1</sup>	1.96 % (2001-2010) <sup>1</sup>
Blood donors (first time)	0.1 % (2009) <sup>2</sup>	0.1 % (2006) <sup>2</sup>
Pregnant women	0.3 % (1998-2007) <sup>3</sup>	0.09 % (1998-2007) <sup>3</sup>
Risk groups		
Injecting drug users	4.3 % (2003-2005) <sup>2</sup>	62 % (2003-2005) <sup>2</sup>
Health care workers	1.8 % (2002) <sup>4</sup>	0.9 % (2002) <sup>4</sup>
Dialysis patients	-	27.4 % (1995) <sup>5</sup>

## Screening<sup>6</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1970)	Yes (1992)
Pregnant women	High-risk groups	No
Injecting drug users	Yes	Yes (1990s)
STI clinic patients	No	No
Haemodialysis patients	Yes (1980s)	Yes (1995)
Health care workers	Yes (1980s)	No
Men having sex with men	Yes	No
Prison population	No	No
Migrants	Ethiopian-born migrants	No
Others	Household contacts HBsAg+, transplant donors and recipients, IVF candidates	Liver disease patients, household contacts, transplant donors and recipients, IVF candidates

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal <sup>7</sup>	Yes	Child (18-24 months)	1999-ongoing
Catch-up	No		
Risk group <sup>8</sup>	Yes	Travellers, IDU, MSM, chronic liver disease; household contacts	1995; 1996
Hepatitis B			
Universal <sup>1h</sup>	Yes	Newborn	1992-ongoing
Catch-up	No		
Risk group <sup>8</sup>	Yes	IDU, MSM, STI patients, haemodialysis patients, occupational risk, contacts HBsAg+	1990

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes
Hepatitis C	Yes (2012) <sup>8</sup>
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others:	No
Number of patients treated for hepatitis B	n/a
Number of patients treated for hepatitis C	2039 (2001-2010) <sup>1</sup>

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for surveillance, vaccination, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on acute hepatitis B incidence<sup>6</sup>

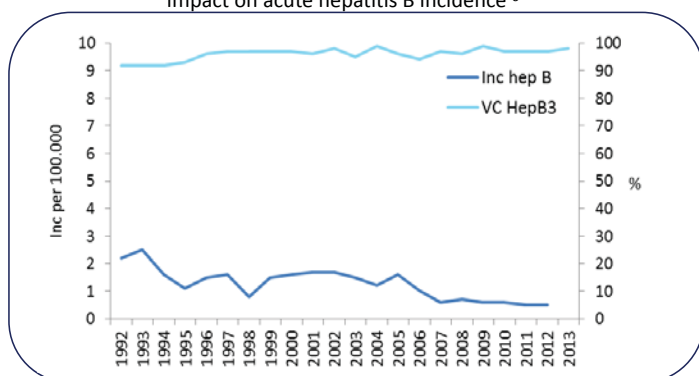
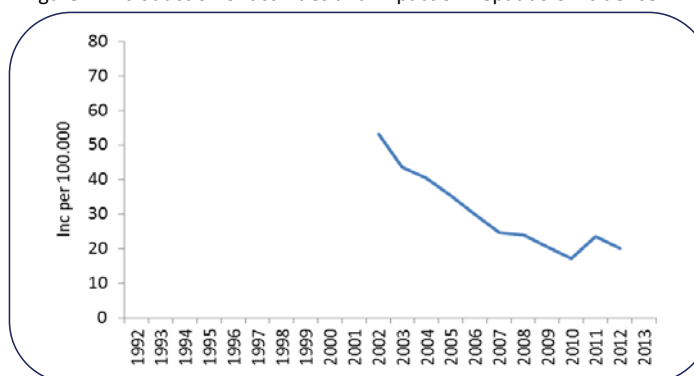


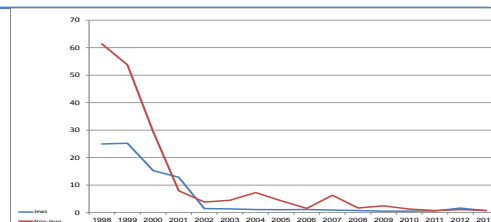
Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>1</sup>



## Specific issues and future challenges

Declining incidence of hepatitis A (Jewish – and non Jewish-) following introduction of universal vaccination in toddlers (1999):

Nationwide screening of specific risk-groups for hepatitis C is planned.



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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ITALY



## Country profile

- Population (in millions) (year): 60,8 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 34 100 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	*	*
Blood donors (first time)	0.3 % (2008) <sup>d</sup>	0.1 % (2008) <sup>d</sup>
Pregnant women	0,9 % (2008-2009)	0.8 % (1996-2001) <sup>c</sup>
Risk groups		
Drug users	2.8 % (2009) <sup>1</sup>	63.9 % (2009) <sup>1</sup>
Sex workers (female)	3.5 % (1999-2007) <sup>2</sup>	0.9 % (1999-2007) <sup>2</sup>
Refugees	8.3 % (2008) <sup>3</sup>	4.5 % (2008) <sup>3</sup>

\* National HBsAg and HCV prevalence data are not available since most study in Italy were conducted in small towns and most of them in Southern Italy which are not representative for the general population (see annex information- regional prevalence data)

## Screening<sup>e</sup>

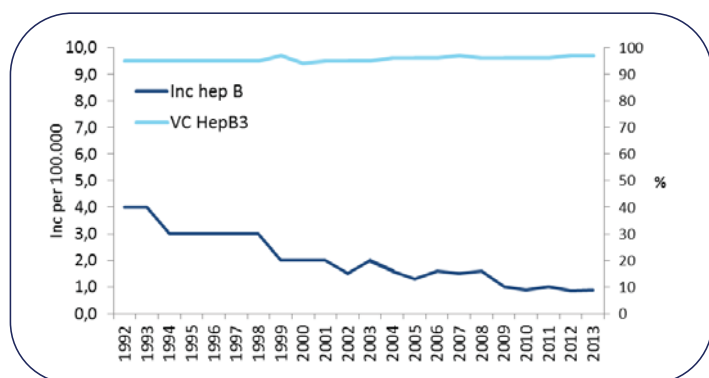
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	Yes (since year ?)	Yes (since year ?)
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	Occupational risk	Occupational risk

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>l</sup> and impact on hepatitis B incidence<sup>i,k</sup>  
Incidence data from SEIEVA surveillance, a voluntary enhanced surveillance represent  $\pm 76\%$  of Italian population



## Vaccination programs

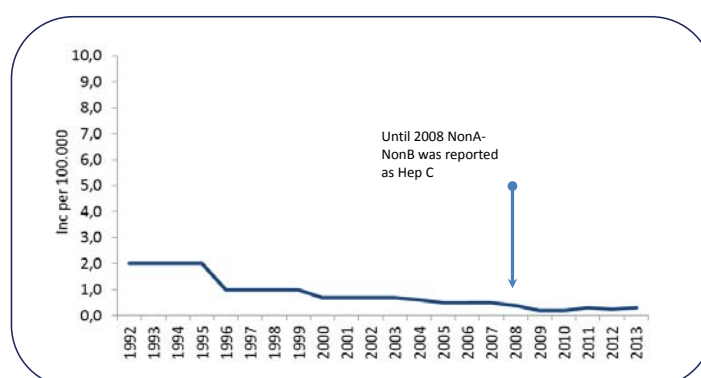
Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	IDU, subjects receiving blood-derived products, household contacts, residents closed communities; military personnel, travellers	1998;
Hepatitis B <sup>e,g,h</sup>			
Universal	Yes	Infant Adolescent (12y)	1991-ongoing 1991-2003
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver patients, STI patients, MSM, multiple sex partners, IDU, contacts HBsAg+ patient	1988

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>i,k</sup>  
Incidence data from SEIEVA surveillance, a voluntary enhanced surveillance represent  $\pm 76\%$  of Italian population



## Specific issues and future challenges

## References

### Country specific references

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## Annex information

## Regional prevalence data in Italy

<b>Town (Region – geographic area)</b>	<b>N° of enrolled subjects</b>	<b>Years</b>	<b>HBsAg prevalence (%)</b>	<b>Anti-HCV prevalence (%)</b>	<b>HCV-RNA prevalence (%)</b>
Buonalbergo (Campania – Center Italy) <sup>1</sup>	488	1997	0.2	16.2	8.8
Camporeale (Sicilia – Southern Italy) <sup>2</sup>	721	1999	0.7	10.4	6.9
Cittanova (Calabria – Southern Italy) <sup>3</sup>	1,645	2001	0.8	6.5	4.9
Vicenza (Veneto – Northern Italy) <sup>4</sup>	965	2002	1.0	2.6	1.0
Pomigliano (Campania – Center Italy) <sup>5</sup>	4,496	2003-2006	2.2	7.5	5.5
Putignano (Puglia – Southern Italy) <sup>6</sup>	2,195	2005-2007	0.5	2.6	1.4

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF KAZAKHSTAN

## Country profile

- Population (in millions) (year): 17,2 (2013)
- Gross national income per capita (int \$) (year): 20 570 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	3.8 % (2006) <sup>1</sup>	3.2 % (2006) <sup>1</sup>
Blood donors (first time)	1.8 % (2009) <sup>1</sup>	
Pregnant women	-	1 % (2006) <sup>1</sup>
Risk groups		
IDU	7.9 % (2002) <sup>1</sup>	60 % (2009) <sup>1</sup>
Men having sex with men	-	4.2 % (2008) <sup>1</sup>
Sex workers	-	11 % (2009) <sup>1</sup>

## Screening

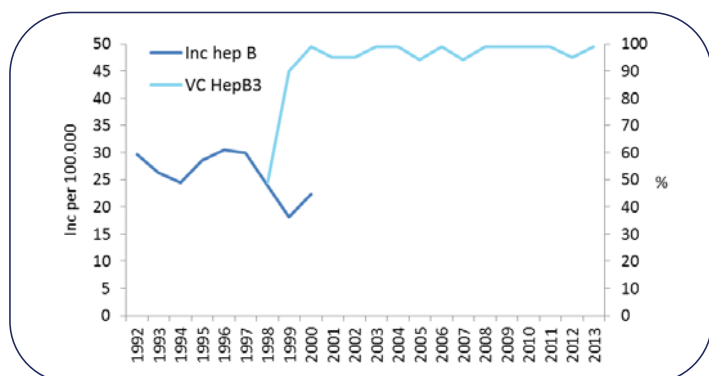
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	?	?
Pregnant women	No <sup>g</sup>	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

A government programme for healthcare development 2011-2015 exists, containing a section dedicated to hepatitis C, but there is no written national strategy or plan that focusses exclusively on the prevention and control of viral hepatitis.<sup>2</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>1</sup> and impact on hepatitis B incidence <sup>3</sup>



## Vaccination programs

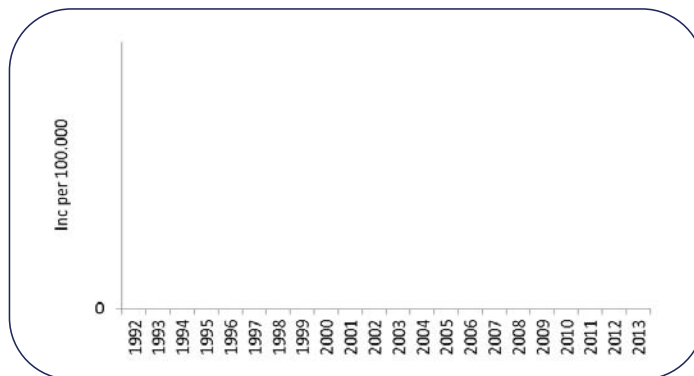
Hepatitis A		Target	Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	1998-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available	
Hepatitis B	?
Hepatitis C	Yes (year ?) <sup>2</sup>
Drugs available for hepatitis C treatment*	
Ribavirin	?
Pegylated interferon	?
Interferon alpha	?
Telaprevir	?
Boceprevir	?
Simeprevir	?
Sofosbuvir	?
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

## References

### Country specific references

1. Hope VD, Eramova I, Capurro D, Donoghoe MC. Prevalence and estimation of hepatitis B and C infections in the WHO European Region: a review of data focusing on the countries outside the European Union and the European Free Trade Association. *Epidemiol Infect.* 2014 Feb;142(2):270-86
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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF KYRGYZSTAN

## Country profile

- Population (in millions) (year): 5,4 (2011)<sup>f</sup>
- Gross national income per capita (int \$) (year): 3070 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	-	-
Pregnant women	-	1.6 % (2005) <sup>1</sup>
Risk groups		
Injecting drug users	-	54 % (2009) <sup>1</sup>
Men having sex with men	-	1.2 % (2008) <sup>1</sup>
Sex workers	-	3.9 % (2009) <sup>1</sup>

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	No <sup>f</sup>	Yes (since year?) <sup>f</sup>
Pregnant women	?	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## Vaccination programs

Hepatitis A		Target	Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2001-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for surveillance, vaccination, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care, for 2011-2015.<sup>2,f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence<sup>3</sup>

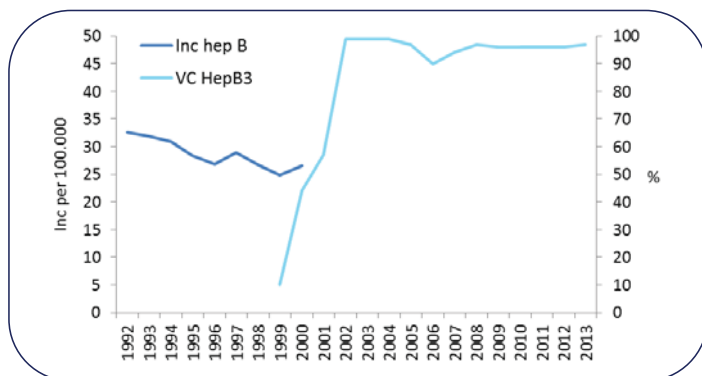
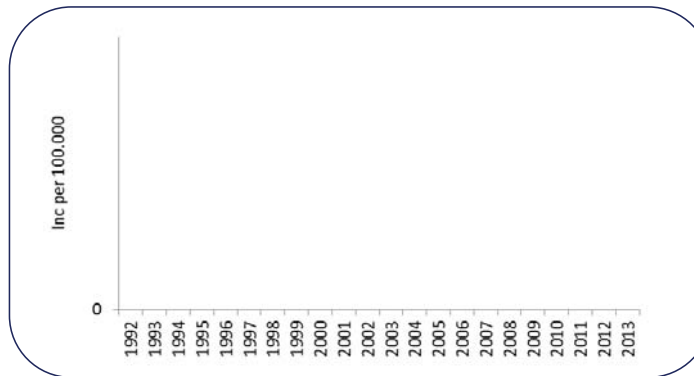


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF LATVIA



## Country profile

- Population (in millions) (year): 2 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 22 970(2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	2.4 % (2011) <sup>1</sup>
Blood donors (first time)	0.5 % (2013) <sup>2</sup>	1.5% (2013) <sup>2</sup>
Pregnant women	0.7% (2008) <sup>3</sup>	-
Risk groups		
Injecting drug users	3.0% (2013) <sup>4</sup>	83.7% (2013) <sup>4</sup>
Men having sex with men	8.8% (2013) <sup>5</sup>	2.0% (2013) <sup>5</sup>
Prison population	7% (2014) <sup>6</sup>	34% (2014) <sup>6</sup>
STI clinic patients	-	-

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1979)	Yes (since 1994)
Pregnant women	Yes (since 1990)	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	No	No
Health care workers	Yes, if not vaccinated, (since 2000)	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	Household and other contacts after exposure <sup>8</sup> (since 2006)	Household and other contacts after exposure <sup>8</sup> (since 2006)

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	No		
Hepatitis B <sup>7</sup>			
Universal	Yes	Infant (0-24 hours after birth) (2,4,6 and 12 months of age)	1997-2009 2010-ongoing
Catch-up	Yes	14y	2006-ongoing
Risk group	Yes	Neonates born to HBsAg+ or not tested mothers (0-12 hours after birth); HCW and other occupational risk; Haemodialysis patients;	2010-ongoing; 2000-ongoing; 2009-ongoing;

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (updated in 2010)
Hepatitis C	Yes (2005, currently is being updated)
Drugs available for hepatitis C treatment*	
Ribavirin	Yes (since 2005)
Pegylated interferon	Yes (since 2005)
Interferon alpha	Yes (since 1994)
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Daclatasvir	No
Abt450/R	No
Ombutasvir	No
Dasabuvir	No
Number of patients treated for hepatitis B	128 (2013) <sup>9</sup>
Number of patients treated for hepatitis C	799 (2013) <sup>9</sup>

\*included on the national essential medicines list or subsidized by the government

## National plan

Action Plan for the Elimination of HIV Infection, Sexually Transmitted Infections and Hepatitis B and C for 2015-2017 (under development).

## Impact

Figure 1: Hepatitis B vaccination coverage and impact on hepatitis B acute and chronic incidence<sup>10</sup>

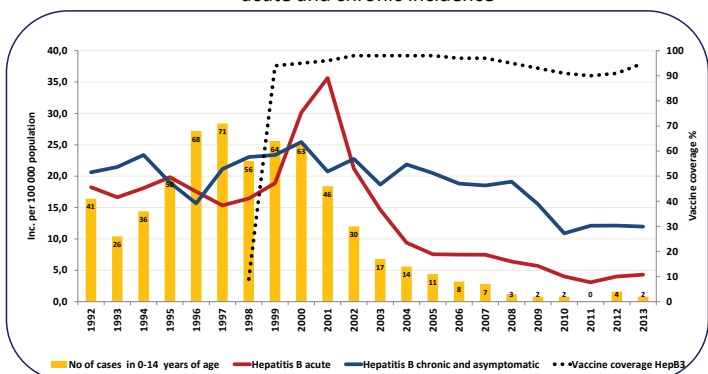
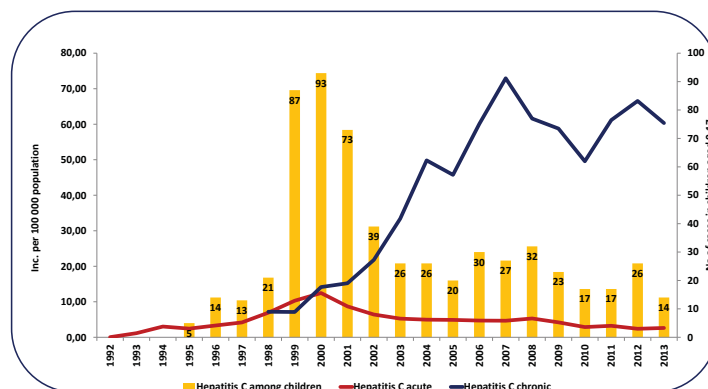


Figure 2 Impact on hepatitis C acute and chronic incidence<sup>10</sup>



## Specific issues and future challenges

- Accessment to testing for hepatitis C in primary care and effective drug treatment should be a highly prioritised.
- Vaccination against hepatitis B (and A) for risk group – HCV-infected individuals, prisoners and employees in prisons.
- Screening programs for people who inject drugs, prisoners, men having sex with men, STI clinic patients.
- The elimination of blood borne virus associated with healthcare services, beauty treatment services, dental care, tattoo, community nursing, etc

Country contact: The Centre for Disease Prevention and Control (CDPC) of Latvia, <http://www.spkc.gov.lv/about-SPKC/>, e-mail: [projects@spkc.gov.lv](mailto:projects@spkc.gov.lv).

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF LITHUANIA



## Country profile

- Population (in millions) (year): 2,9 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 23 110 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	2.8 % (2010) <sup>1</sup>
Blood donors (first time)	0.3 % (2008) <sup>d</sup>	0.6 % (2008) <sup>d</sup>
Pregnant women	-	-
<b>Risk groups</b>		
Injecting drug users	3.3 % (2006) <sup>c</sup>	79 % (2000) <sup>2</sup> 94 % (2008) <sup>4</sup>
Haemodialysis patients	14.4 % (2001) <sup>3</sup>	15.4 % (2001) <sup>3</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1969)	Yes (1993)
Pregnant women	No	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	Occupational risk	Occupational risk

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	No		
Hepatitis B <sup>e,g,h,l</sup>			
Universal	Yes	Newborn Adolescents (12y)	1998-ongoing 2002-2010
Catch-up	No		
Risk group	Yes	Haemodialysis patients, occupational risk,	1998

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (2005)
Hepatitis C	Yes (2008)
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	YES
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	?
Number of patients treated for hepatitis B	100
Number of patients treated for hepatitis C	600/year

\*included on the national essential medicines list or subsidized by the government

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

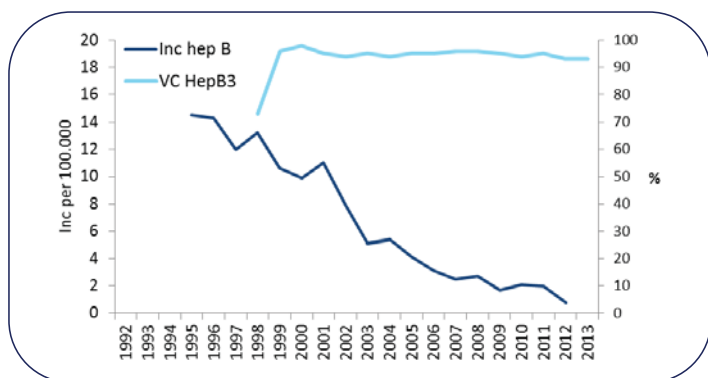
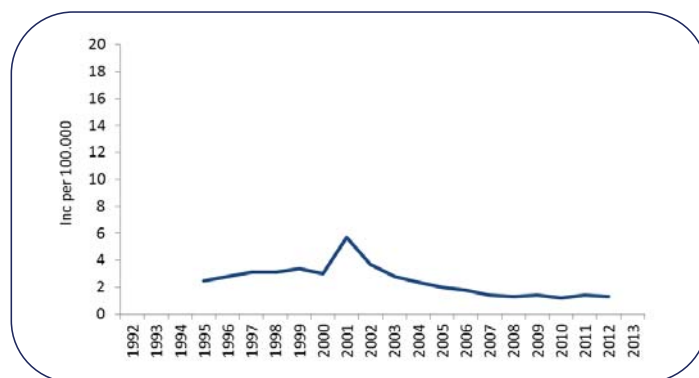


Figure 2: Introduction of activities and impact<sup>j,k</sup> on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF LUXEMBOURG

## Country profile

- Population (in millions) (year): 0,5 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 59 750 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0 % (2008) <sup>d</sup>	0 % (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	3.9 % (2005) <sup>1</sup>	81.3 % (2005) <sup>1</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	?	?
Pregnant women	?	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, chronic liver disease, hospital staff, household contacts	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Infant	1996-ongoing
Catch-up	No		
Risk group	Yes	Occupational risk	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

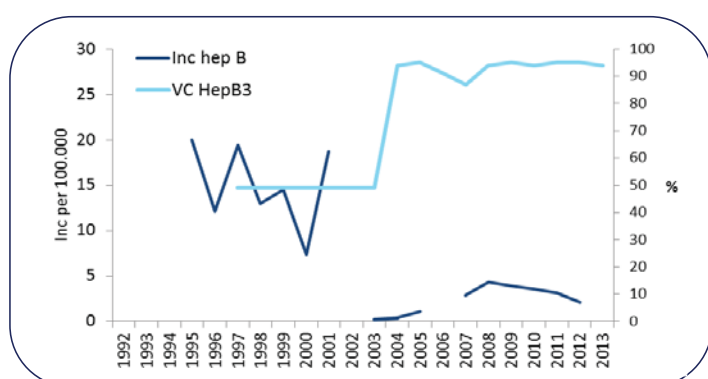
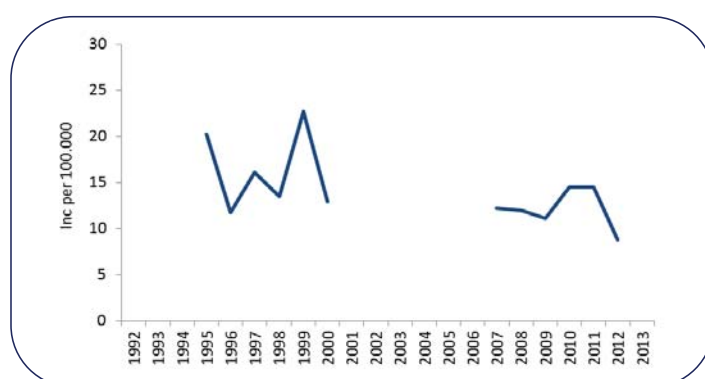


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF MALTA

## Country profile

- Population (year): 425 384 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 26 940 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0.2 % (2008) <sup>d</sup>	0 % (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	-	33.1 % (2006) <sup>1</sup>
Migrants	6.2 % (2010-2011) <sup>2</sup>	0.6 % (2010-2011) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	Yes (since year ?)
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	Yes (since year ?)	Yes (since year ?)
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	Yes (since year ?)	Yes (since year ?)
Men having sex with men	No	No
Prison population	Yes (since year ?)	Yes (since year ?)
Migrants	No	No
Others	Occupational risk Military recruits	Occupational risk

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>4,g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, chronic liver disease, hospital staff; Household contacts ; occupational risk	1995; 1996; 1998
Hepatitis B <sup>e,gh</sup>			
Universal	Yes	Infant	1997-ongoing
Catch-up	Yes	?	2003-2009
Risk group	Yes	Household contacts HBsAg+ patient; Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients; IDU; STI patients, MSM	1980; 1990; 1999; 2000

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	No
Pegylated interferon	No
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

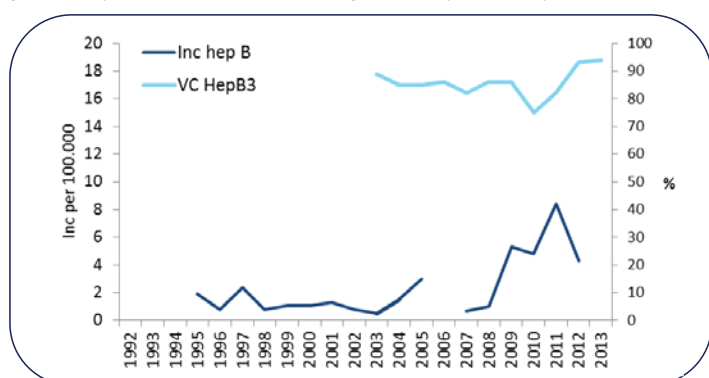
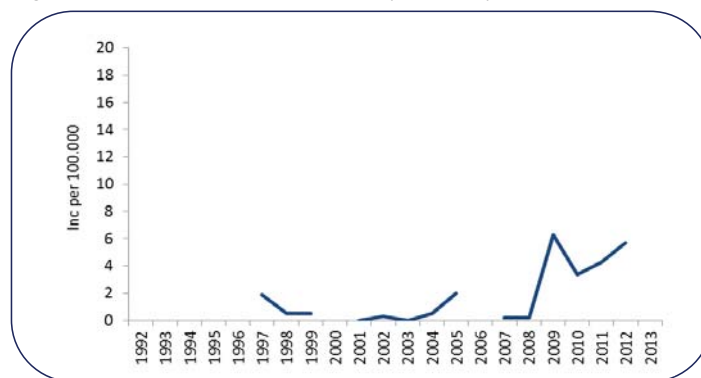


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>i,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF MONACO

## Country profile

- Population (year): 36 950 (2013)<sup>1</sup>
- Gross national income per capita (int \$) (year): 186 950 (2008)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	-	-
Pregnant women	-	-
Risk groups		
Injecting drug users	-	-

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	?	?
Pregnant women	?	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no information available on the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis. <sup>f</sup>

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Infant	1999-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available	
Hepatitis B	? (if yes, specify year)
Hepatitis C	? (if yes, specify year)
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	?
Pegylated interferon	?
Interferon alpha	?
Telaprevir	?
Boceprevir	?
Simeprevir	?
Sofosbuvir	?
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>l</sup> and impact on hepatitis B incidence

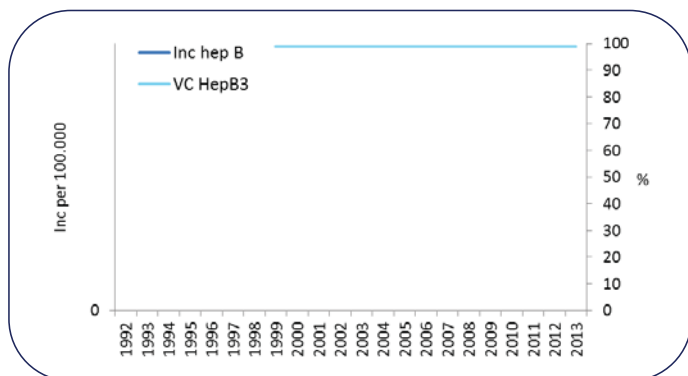
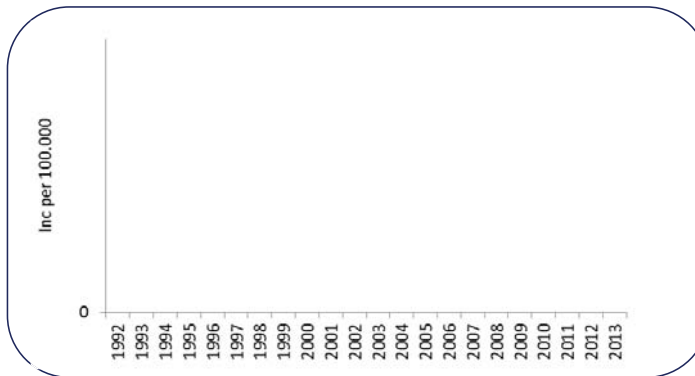


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF MONTENEGRO

## Country profile

- Population (year): 624 335 (2013)<sup>a</sup>
- Gross national income per capita (int \$) (year): 14 600 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0.5 % (2008) <sup>d</sup>	0.6 % (2006) <sup>d</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	0 % (2007) <sup>1</sup>	53.7 % (2008) <sup>2</sup>

## Screening<sup>f</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?)	Yes (since year?)
Pregnant women	Yes (since year?)	Yes (since year?)
Injecting drug users	No	No
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence

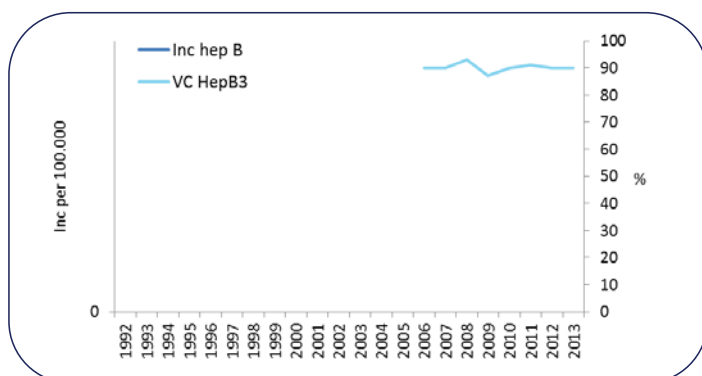
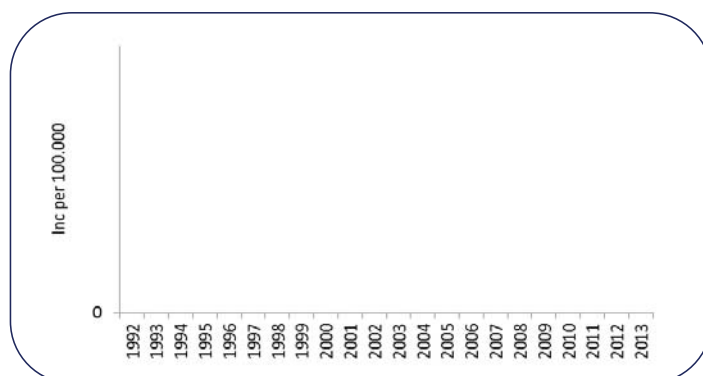


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Infant	2004-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF THE NETHERLANDS

## Country profile

- Population (in millions) (year): 16,8 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 43 210 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.1 % (1995-1996) <sup>c</sup>	0.6 % (2004) <sup>c</sup>
Blood donors (first time)	0.06 % (2008) <sup>d</sup>	0.01 % (2008) <sup>d</sup>
Pregnant women	1.2 % (1993-1998) <sup>c</sup>	0.8 % (1996-2001) <sup>c</sup>
Risk groups		
Injecting drug users	3 % (2000) <sup>c</sup>	26 % (2004-2008) <sup>1</sup>
Health care workers		1.4 % (2000-2009) <sup>2</sup>
Migrants	2.2 % (2011) <sup>3</sup>	0.9 % (2011) <sup>3</sup>
Men having sex with men		4.6 % (2007-2008) <sup>4</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	No	No
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>5</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Contacts of hepatitis patients, occupational risk, chronic liver disease, travellers to an endemic region, residents close communities	
Hepatitis B <sup>e,gh</sup>			
Universal	Yes	Infant	2011-ongoing
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers; IDU, MSM, STI patients; occupational risk, haemodialysis patients, contacts HBsAg+ patient, persons with Down's syndrome, sex workers, newborns with at least one parent originating from an HBV-endemic country	1989; 2003;

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2012) <sup>6</sup>
Hepatitis C	Yes (2013) <sup>7</sup>
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	?
Pegylated interferon	?
Interferon alpha	?
Telaprevir	?
Boceprevir	?
Simeprevir	?
Sofosbuvir	?
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>l</sup> and impact on hepatitis B incidence<sup>i,k</sup>

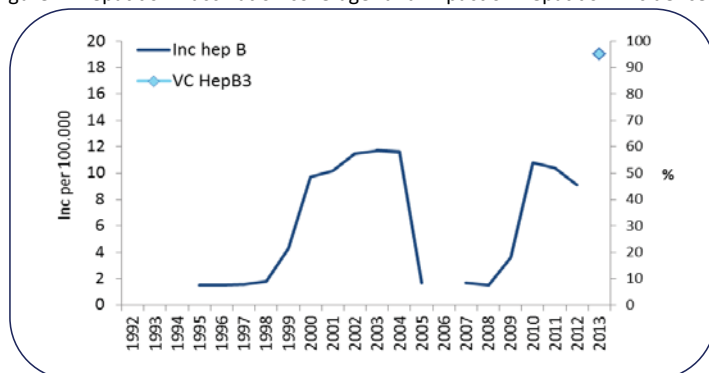
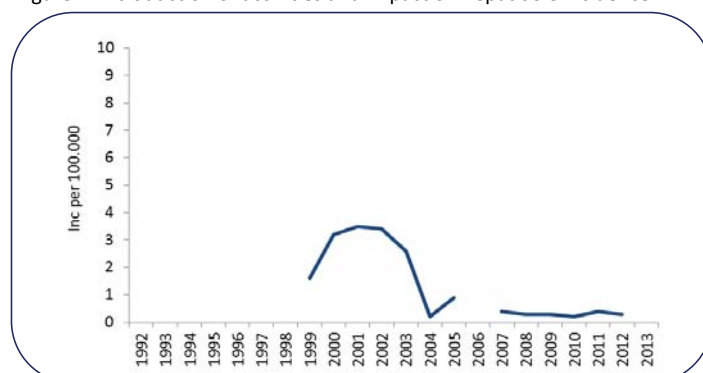


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>i,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF NORWAY



## Country profile

- Population (in millions) (year): 5,1 (2014)<sup>a</sup>
- Gross national income per capita (in int \$) (year): 66 520 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0.04% (2008) <sup>d</sup>	0.09% (2008) <sup>d</sup>
Pregnant women	0.1% (2003-2004) <sup>1</sup>	-
Risk groups		
Injecting drug users	1.2% (2008) <sup>2</sup>	71.3 % (2008) <sup>2</sup>

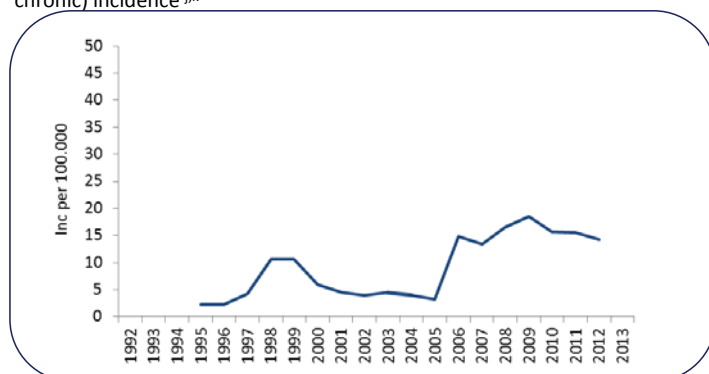
## Screening<sup>e</sup>

Screening programs for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1970s)	Yes (1990)
Pregnant women	No	No
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes (1980s)	Yes (1990)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

National strategy plan for viral hepatitis will be published in 2015.

Figure 1: Introduction of activities and impact on hepatitis B (acute and chronic) incidence <sup>j,k</sup>



## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Chronic liver disease; IDU; MSM travellers, children of migrants	1994; 1999;
Hepatitis B <sup>e,g,h</sup>			
Universal	No		
Catch-up	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, patients with chronic renal failure, patients with chronic liver disease, Down-syndrome, IDU, MSM, sex workers, household contacts HBsAg+ patient; children under 3 y of age attending daycare centers where a case has been diagnosed, neonates born to migrants and immigrants >25y from medium/high prevalent countries;	1984;  1992

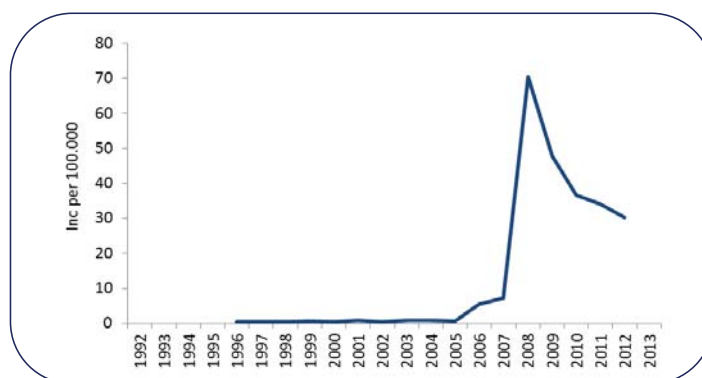
## Treatment

National guidelines for clinicians available	
Hepatitis B	No
Hepatitis C	Yes
Drugs available for hepatitis C treatment*	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	Yes
Sofosbuvir	Yes
Others: (Daclatasvir)	Yes
Number of patients treated for hepatitis B	Approx. 400 (2012)
Number of patients treated for hepatitis C	Approx 800 (2012)

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>j,k</sup>



## Specific issues and future challenges

Case definitions for hepatitis C changed in 2008

## References

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF POLAND



## Country profile

- Population (in millions) (year): 38,5 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 22 300 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	0.95 % (2011) <sup>1</sup>
Blood donors (first time)	0.5 % (2007) <sup>d</sup>	0.3 % (2007) <sup>d</sup>
Pregnant women		2% (2008) <sup>8</sup>
Risk groups		
Injecting drug users	3.2% (2009) <sup>2</sup>	57.5 % (2009) <sup>2</sup>
Health care workers	1.2 % (2009) <sup>3</sup>	0.8 % (2009) <sup>3</sup>
Haemophiliacs born 1935-1990	8.7 % (2007) <sup>4</sup>	95 % (2007) <sup>4</sup>

## Screening<sup>e</sup>

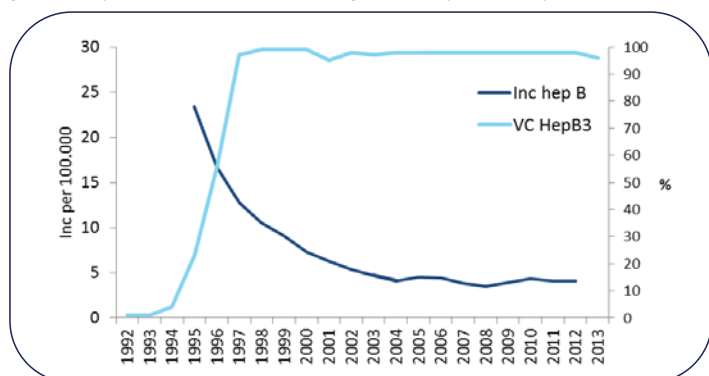
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (HBsAg since 1976, HBV DNA - 2005 of all donations)	Yes (a-HCV since 1992, HCV RNA-2000)
Pregnant women	Yes (since 1989)	<del>No</del> -Yes (mandatory since 2010)
Injecting drug users	No	No
STI clinic patients	No	No
Haemodialysis patients	Yes (since 1976)	<del>No</del> -Yes (since 1992)
Health care workers	No	No
Men having sex with men	No	No
Prison population	No	Yes (if tattoos or IDU)
Migrants	No	No
Others	Occupational risk	Occupational risk

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>l</sup> and impact on hepatitis B incidence <sup>i,k</sup>



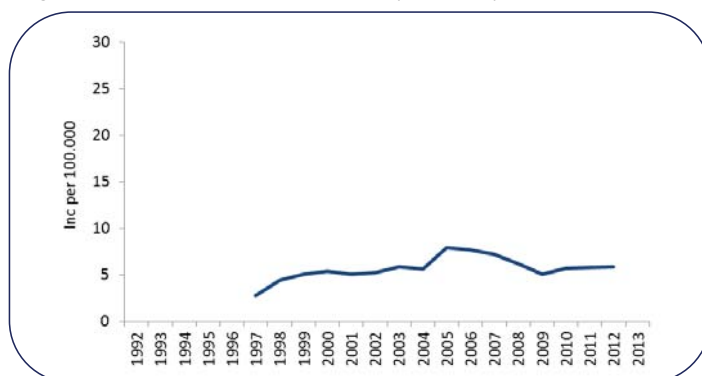
## Vaccination programs

Hepatitis A <sup>5, g</sup>		Target	Since/Period
Universal	No		
Risk group (recommended)	Yes	People dealing with food distribution; travellers, people employed in removing urban waste, liquid impurities and people responsible for maintenance of equipment for this purpose, pre-school children and youth who have not been infected with HAV	Since 1996
Hepatitis B <sup>e,g,h</sup>			
Universal	Yes	Newborns Adolescent (14y)	1996-ongoing 2000-2008
Catch-up	No		
Risk group (mandatory)	Yes	health care workers, medical school students, haemodialysis patients, contacts HBsAg+ patient, HCV infected patients. (1989-neonates born to HBsAg+ mothers)	1990- ongoing

National guidelines for clinicians available	
Hepatitis B	Yes (2013) <sup>6</sup>
Hepatitis C	Yes (2014) <sup>7</sup>
Drugs* available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	~4000

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>i,k</sup>



## Specific issues and future challenges

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF PORTUGAL

## Country profile

- Population (in millions) (year): 10,4 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 25 350 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.9 % (1993) <sup>1</sup>	0.46 % (1993) <sup>1</sup>
Blood donors (first time)	0.09 % (2006) <sup>d</sup>	0.2 % (2006) <sup>d</sup>
Pregnant women		
Risk groups		
Injecting drug users	2.9 % (2009) <sup>2</sup>	83.1 % (2009) <sup>2</sup>
Prisoners	3% (1999-2003) <sup>3</sup>	42% (1999-2003) <sup>3</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	Yes (since year ?)	No
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	Yes (since year ?)	Yes (since year ?)
Migrants	No	No
Others	Occupational risk, military recruits	No

## National plan

No information available.<sup>f</sup>

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers (others ?)	
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Newborn Adolescent (10-13y)	2011-ongoing 1994-2011
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver disease, STI patients, IDU, contacts HBsAg+ patient	

## Treatment

National guidelines for clinicians available	
Hepatitis B	? (year ?)
Hepatitis C	? (year?)
Drugs available for hepatitis C treatment*	
Ribavirin	
Pegylated interferon	?
Interferon alpha	?
Telaprevir	?
Boceprevir	?
Simeprevir	?
Sofosbuvir	?
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	1200 (2011) <sup>4</sup>

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

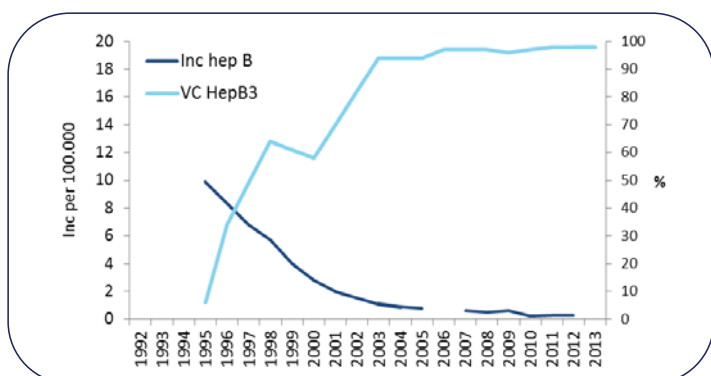
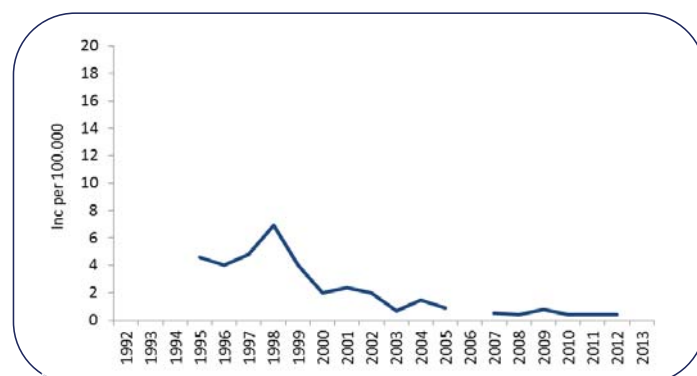


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF MOLDOVA



## Country profile

- Population (in millions) (year): 3,6 (2014)<sup>1</sup>
- Gross national income per capita (in US\$) (year): 5190 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	3.02% (2007-2012) <sup>8</sup>	1.44 % (2007-2012) <sup>8</sup>
Pregnant women	9.7 % (1994) <sup>2</sup>	2.3 % (1994) <sup>2</sup>
Women of reproductive age	4.4% (2010) <sup>8</sup>	2,5% (2010) <sup>8</sup>
<b>Risk groups</b>		
IDU	6.8 % (2007) <sup>3</sup>	43 % (2007) <sup>3</sup> 53,6 % (2013-2014) <sup>8</sup>
MSM	-	2.5 % (2010) <sup>4</sup>
Sex workers (female)	9.1 % (2009-2010) <sup>5</sup>	22.6 % (2009-2010) <sup>5</sup>
Haemodialysis patients	8.3 % (2011-2013) <sup>8</sup>	43.2 % (2011-2013) <sup>8</sup>
Health care workers of hospitals	10.1 % (2011-2013) <sup>8</sup>	4.4 % (2011-2013) <sup>8</sup>
Dentists	8.6% (2013) <sup>8</sup>	7.8% (2013) <sup>8</sup>
TB infected patients	18% (2012) <sup>8</sup>	9% (2012) <sup>8</sup>
HIV infected patients	21.2 % (2012) <sup>10</sup>	56.9 % (2012) <sup>10</sup>

## Screening<sup>f</sup>

Recommended for following groups: <sup>9</sup>	Hep B	Hep C
Blood and organ donors	Yes (1994)	Yes (1994)
Pregnant women	Yes (1992)	Yes (2012)
Injecting drug users	Yes (2012)	Yes (2012)
STI clinic patients	Yes (2012)	Yes (2012)
Haemodialysis patients	Yes (2007)	Yes (2007)
Health care workers	Yes (1998)	Yes (1998)
Men having sex with men	Yes (2012)	Yes (2012)
Prison population	Yes (2012)	Yes (2012)
Migrants	Yes (2012)	Yes (2012)
Others	Yes (2012)	Yes (2012)

## Vaccination programs

Hepatitis A		Target	Period
Universal	No		
Risk group	Yes	children from orphanages, for post exposure prophylaxis	2002, 2005, 2014 2014
<b>Hepatitis B</b>			
Universal <sup>h</sup>	Yes	Newborn Adolescent (13-17)	1995-ongoing 2005
Catch-up <sup>9</sup>	Yes	Female 25-35 years old	2012-2016
Risk group <sup>9</sup>	Yes	People in contact with HBV patients, MSM, STD patients, HCWs, medical students, prison population, UDIs, haemodialysis patients, HIV infected persons, patients with chronic liver diseases, TB patients, VHC patients, oncology patients, military personal.	2012-2016

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (2008)
Hepatitis C	Yes (2008)
<b>Drugs available for hepatitis C treatment*<sup>f</sup></b>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B <sup>9</sup>	300 per year
Number of patients treated for hepatitis C <sup>9</sup>	300 per year

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focusses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>8</sup>

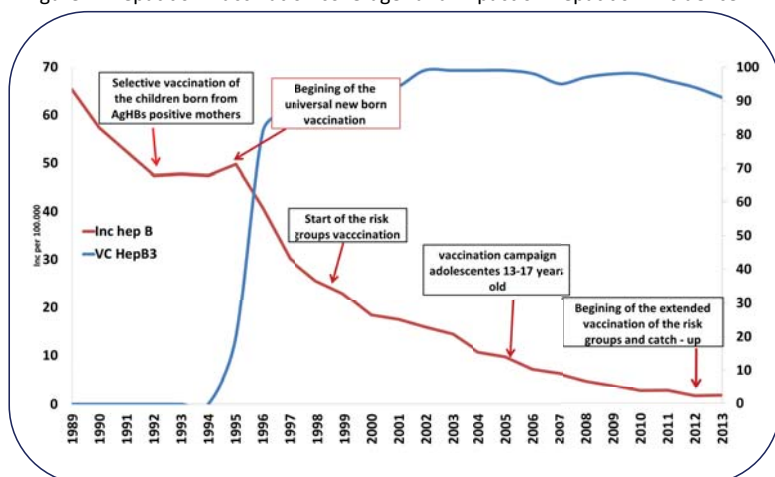
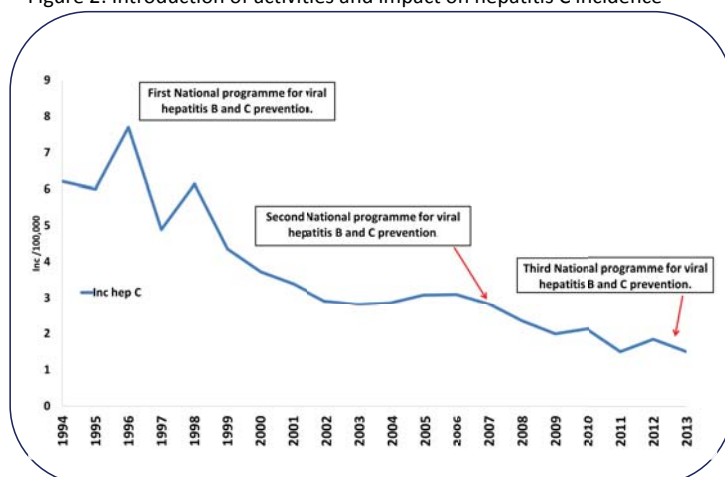


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>8</sup>



## Specific issues and future challenges

- introducing behavior changing epidemiological surveillance
- VHA vaccination of risk groups?

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF ROMANIA



## Country profile

- Population (in millions) (year): 19,9 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 18 060 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	4.2 % (2013)	5.6 % (2013)
Blood donors (first time)	3.7 % (2006) <sup>d</sup>	0.9 % (2006) <sup>d</sup>
Pregnant women	-	-
Risk groups		
IDU	6.7 % (2008-2009) <sup>1</sup>	88.9 % (2008-2009) <sup>1</sup>
Prison population	10.7 % (2010) <sup>2</sup>	5.2 % (2010) <sup>3</sup>
Haemodialysis patients	10.2 % (1997) <sup>4</sup>	29 % (1997) <sup>4</sup>

## Screening<sup>e</sup>

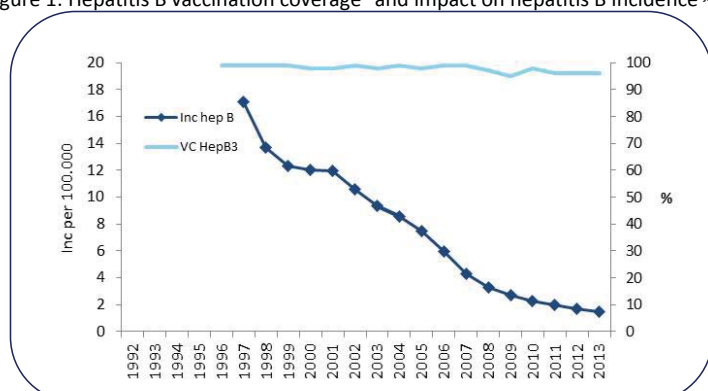
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (before 1989-immunodiffusion; 1990-ELISA)	Yes (1995-ELISA)
Pregnant women	Yes (2012)	Yes (2012)
Injecting drug users	Yes (2002)	Yes (2002)
STI clinic patients	Yes (2014)	Yes (2014)
Haemodialysis patients	No	No
Health care workers	Yes (2006)	No
Men having sex with men	No	No
Prison population	No	No
Migrants	No	No
Others	No	No

## National plan

No information available.<sup>f</sup> A methodology for surveillance has been implemented in 2012, including public health recommendations. Last update: 24/03/2014.<sup>5</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k,6,7</sup>



## Vaccination programs

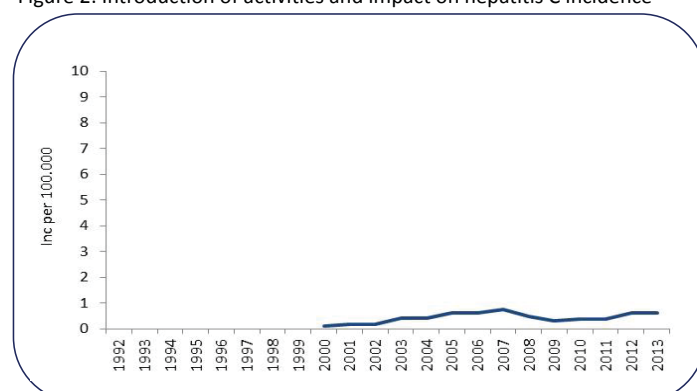
Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Outbreak areas; household contacts	2000; 2003
Hepatitis B <sup>e, g, h</sup>			
Universal	Yes	Newborn Child (9y) Adults (18y)	1995-ongoing 1999-2007 2004-2007
Risk group	Yes	Occupational risk; household contacts HBsAg+ patient	1995; 2003

## Treatment

National guidelines for clinicians available	
Hepatitis B	Yes (2003)-treatment protocol of the National Health Insurance House
Hepatitis C	Yes (2003) treatment protocol of the National Health Insurance House
Drugs available for hepatitis C treatment*	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes, but not used anymore
Telaprevir	Yes, but not yet subsidized by the National Health Insurance House (NHIH) / free
Boceprevir	Idem
Simeprevir	Idem
Sofosbuvir	Idem
Others: (specify)	NA
Number of patients treated for chronic hepatitis B	7282 (2013)
Number of patients treated for chronic hepatitis C	9104 (2013)

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>i,k,7</sup>



## Specific issues and future challenges

- To improve surveillance of Hepatitis B and C
- To intensify health promotion activities in adolescents and young adults
- To improve prevention of Hepatitis B and C in health care facilities
- To assess the need of a booster of Hepatitis B vaccine in 14 years old children

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF THE RUSSIAN FEDERATION



## Country profile

- Population (in million) (year): 143,3 (2013)<sup>1</sup>
- Gross national income per capita (int \$) (year): 23 200 (2013)<sup>2</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	2 % (2012) <sup>2</sup>	4.1 % (2012) <sup>2</sup>
Blood donors (first time)	0.2 % (2012) <sup>3</sup>	0.6 % (2012) <sup>3</sup>
Pregnant women	0.6 % (2012) <sup>3</sup>	1.3 % (2012) <sup>3</sup>
Risk groups		
Injecting drug users	34 % (2001-2002) <sup>4</sup>	90 % (2009) <sup>4</sup>
Men having sex with men	-	2.3 % (2004) <sup>4</sup>
Sex workers	-	22 % (2009) <sup>4</sup>

## Screening

Obligatory for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1990) <sup>6</sup>	Yes (1994) <sup>8</sup>
Pregnant women	Yes (1990) <sup>6</sup>	Yes (2000) <sup>9</sup>
Injecting drug users	Yes (1990) <sup>6</sup>	Yes (2000) <sup>8</sup>
STI clinic patients	Yes (1990) <sup>6</sup>	Yes (2000) <sup>9</sup>
Hemodialysis patients	Yes (1990) <sup>6</sup>	Yes (2000) <sup>9</sup>
Health care workers	Yes (1990) <sup>6</sup>	Yes (2000) <sup>9</sup>
Men having sex with men	No	No
Prison population	Yes (2005) <sup>7</sup>	Yes (2005) <sup>7</sup>
Migrants	No	No
Others	Yes (1990) <sup>6</sup>	Yes (2000) <sup>9</sup>

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Health care workers, Employees of the food industry, Workers serving water and sewer facilities, equipment and networks, Persons traveling to countries where hepatitis A outbreaks are registered, Persons in effective disease area, People living in the territory with a high incidence of hepatitis A	2001-ongoing
Hepatitis B			
Universal	Yes	Newborn Children from 1 to 18 years and adults from 18 to 55 years	1996-ongoing 2001-ongoing
Catch-up	No		
Risk group	Yes	Health care workers, medical students, patients receiving repeated blood transfusions, hemodialysis patients, family members of patients with chronic HepB and carriers of HbsAg, injecting drug users	1996-2001

## Treatment

National guidelines for clinicians available	
Hepatitis B <sup>11</sup>	Yes (2014)
Hepatitis C <sup>12</sup>	Yes (2013)
Drugs available for hepatitis C treatment <sup>b</sup>	
Ribavirin*	Yes
Pegylated interferon*	Yes
Interferon alpha*	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	Yes
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	1816 (2012) <sup>2</sup>
Number of patients treated for hepatitis C	32659 (2012) <sup>2</sup>

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focusses primarily on the prevention and control of viral hepatitis and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.<sup>b</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>c</sup> and impact on acute hepatitis B incidence<sup>5</sup>

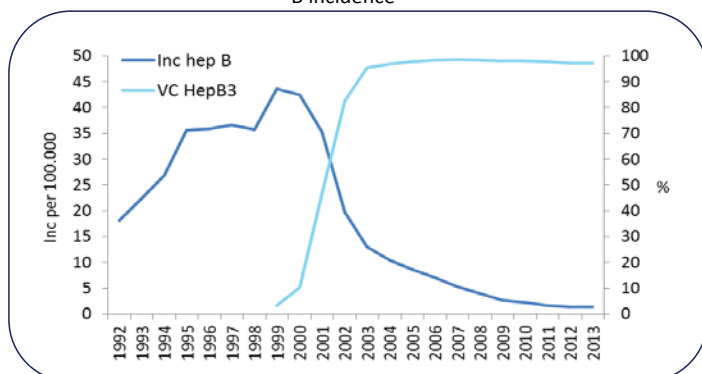
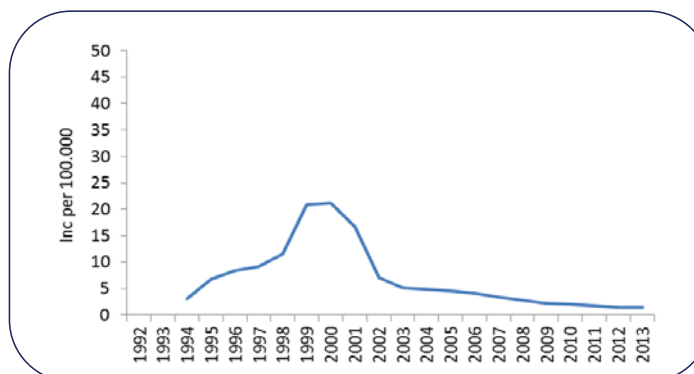


Figure 2: Introduction of activities and impact on acute hepatitis C incidence<sup>5</sup>



## Specific issues and future challenges

In order to improve viral hepatitis B and C surveillance and continuity between screening programs and clinical care in 2012 was initiated the implementation of the national viral hepatitis registry.

National strategy for viral hepatitis requires major revision in respect of access to antiviral treatment.

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SAN MARINO

## Country profile

- Population (year): 31 450 (2013)<sup>b</sup>
- Gross national income per capita (int \$) (year): 51 470 (2008)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	-	-
Pregnant women	-	-
Risk groups		
IDU	-	-
Other ?		

## Screening<sup>f</sup>

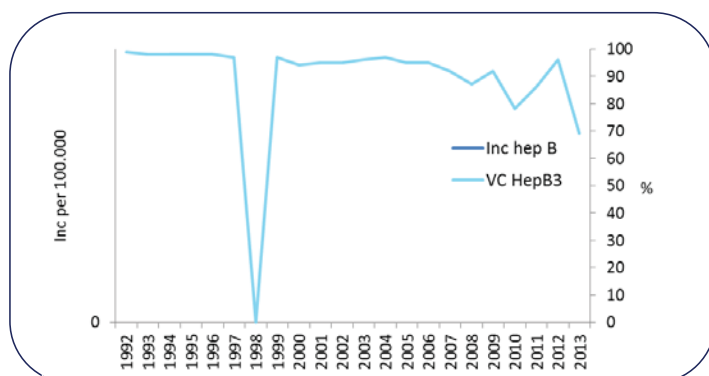
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?)	Yes (since year?)
Pregnant women	?	?
Injecting drug users	No	No
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence



## Vaccination programs

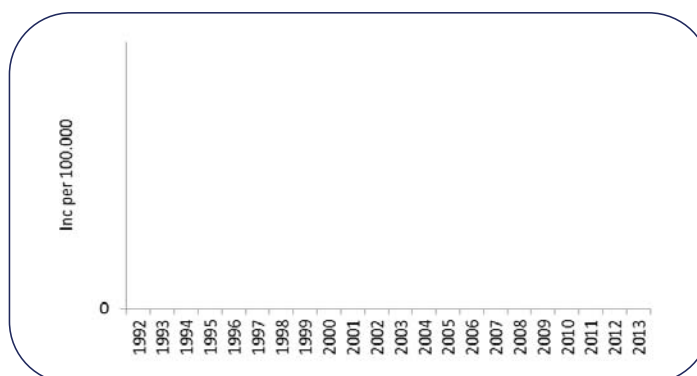
Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	1991-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

## References

### Country specific references

### General references

- a. Eurostat. EU28 population at 1 January 2014. Available from: <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00001&plugin=1>
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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SERBIA



## Country profile

- Population (in millions) (year): 7,1 (2013)<sup>a</sup>
- Gross national income per capita (int \$) (year): 12 020 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	4.2 % (2000-2003) <sup>1</sup>	0.3 % (2000-2003) <sup>1</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	15 % (2006)	54 % (2008) <sup>1</sup>
Men having sex with men	8.7 % (2006) <sup>1</sup>	0 % (2006) <sup>1</sup>
Sex workers	18.3 % (2006) <sup>1</sup>	3.3 % (2006) <sup>1</sup>

## Screening<sup>f</sup>

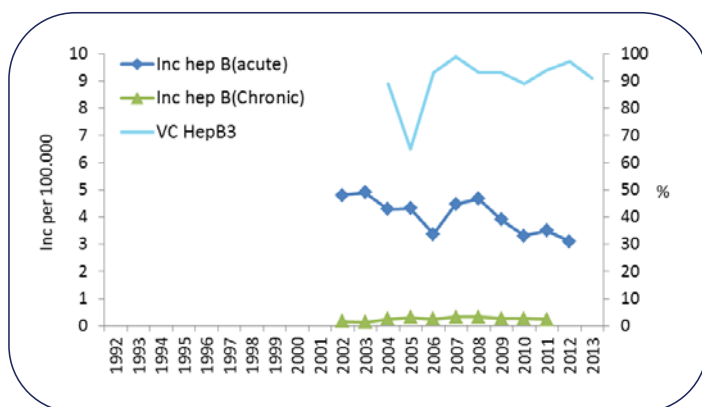
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?)	Yes (since year?)
Pregnant women	YES	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	YES	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence



## Vaccination programs

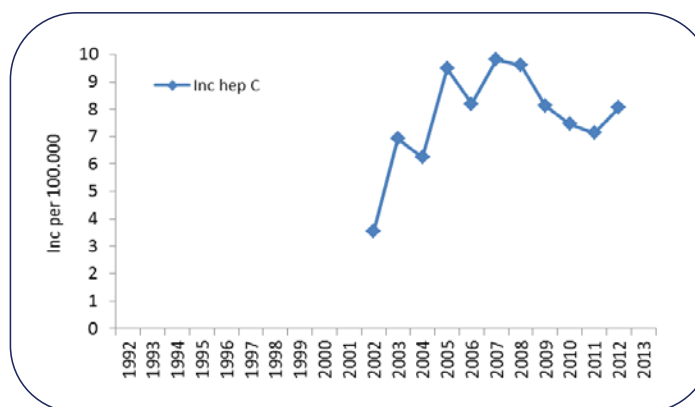
Hepatitis A		Target	Since/period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Infant	2004-ongoing
Catch-up	?		
Risk group	Yes	Neonates born to HBsAg+ mothers , Individuals at risk for HBV due to occupation , Haemodialysis patients, Injecting drug users , Household contacts of HBsAg+ patient , patient with haemophilia insulin-dependent diabetics	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (year ?)
Hepatitis C	Yes (year ?)
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

A comprehensive mandatory reporting system for HBV and HCV cases (acute and chronic cases are reported by physician). And a passive case based surveillance system, epidemiologists investigate all reported cases (suspected or laboratory-confirmed) and follow up with the patient and his direct contacts; are in place in Serbia. Asymptomatic infections are often not included in the national surveillance systems.

**Note:** There is a wide variety in reported data since hepatitis C is often asymptomatic and no clear diagnostic criteria are available to differentiate between acute and chronic cases.

Country contact: **Goranka Loncarevic**, MD, epidemiologist, Head of Department for surveillance VPD and immunisation, IPH of Serbia. [afp@batut.org.rs](mailto:afp@batut.org.rs) and **Danijela Simic**, MD ( Head for department for HIV/AIDS, TBC, sexual transmitted diseases and hepatitis in IPH of Serbia)

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SLOVAK REPUBLIC

## Country profile

- Population (in millions) (year): 5,4 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 24 740 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	0.6 % (2002) <sup>c</sup>	-
Blood donors (first time)	0.1 % (2008) <sup>d</sup>	0.06 % (2008) <sup>d</sup>
Pregnant women	4.4 % (2000-2004) <sup>c</sup>	0 % (2000-2004) <sup>c</sup>
Risk groups		
Injecting drug users	-	34-78% (2004-2008) <sup>1</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year ?)	Yes (since year ?)
Pregnant women	Yes (since year ?)	No
Injecting drug users	Yes (since year ?)	Yes (since year ?)
STI clinic patients	Yes (since year ?)	Yes (since year ?)
Haemodialysis patients	Yes (since year ?)	Yes (since year ?)
Health care workers	No	No
Men having sex with men	No	No
Prison population	Yes (since year ?)	Yes (since year ?)
Migrants	No	No
Others	Military recruits	Military recruits

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, occupational risk, household contacts	1996-1997
Hepatitis B <sup>e,g,h</sup>			
Universal	Yes	Infant Child (10y)	1998-ongoing 2004-ongoing
Risk group	Yes	Haemodialysis patients; occupational risk, neonates born to HBsAg+ mothers; contacts HBsAg+ patient; IDU, MSM; STI patients	1983; 1985;  1990; 1997; 1999

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (year ?)
Hepatitis C	Yes (year?)
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: ( <i>specify</i> )	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

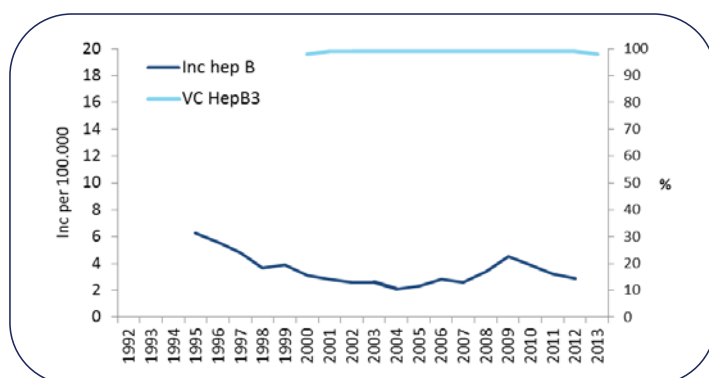
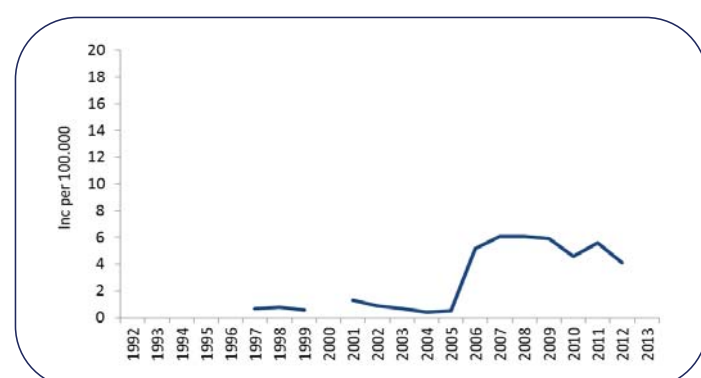


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SLOVENIA



## Country profile

- Population (in millions) (year): 2,1 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 27 610 (2012)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	Evaluated <1%	Evaluated 1-2%
Blood donors (first time)	0.09 % (2008) <sup>d</sup>	0.04 % (2008) <sup>d</sup>
Pregnant women	-	-
Risk groups		
People who inject drugs (PWID)	3.4 % (2002) <sup>c</sup>	21.7 % (2002-2008) <sup>1</sup>
HIV patients	-	7.6 % (2013) <sup>2</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1970)	Yes (1993)
Pregnant women	Yes (1994)	No
Injecting drug users	Yes (1995)	Yes (1995)
STI clinic patients	Yes (1995)	Yes (1995)
Haemodialysis patients	Yes (1980)	Yes (1993)
Health care workers	Yes (2008)	No
Men having sex with men	No	No
Prison population	Yes (1995)	Yes (1995)
Migrants	No	No
Immunocompromised	Yes (2010)	No

## Vaccination programs

Hepatitis A <sup>b</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, PWID, MSM; occupational risk; clotting factors disorder; chronic liver disease	1995; 1997; 2000; 2002
Hepatitis B <sup>c</sup>			
Universal	Yes	Child (5-6y)	1998-ongoing
Risk group	Yes	Neonates born to HBsAg+ mothers; occupational risk; medical students, contacts HBsAg+ patient; haemodialysis patients; PWID; STI patients	1994; 1983; 1988; 1991; 1993; 1997

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (2010)
Hepatitis C	Yes (1997)
Drugs available for hepatitis C treatment <sup>*</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	App. 2500
Number of patients treated for hepatitis C	App. 1500

<sup>\*</sup>included on the national essential medicines list

## National plan

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via PWID, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV. <sup>F</sup>A national strategy for the management of hepatitis C exists since 1997 headed by the National Viral Hepatitis Expert Group. Besides, since 2007 special National Strategy for the Management of HCV infection in PWID exists together with a multidisciplinary healthcare network.

## Impact

Figure 1: Hep B vaccination coverage (7y)<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>

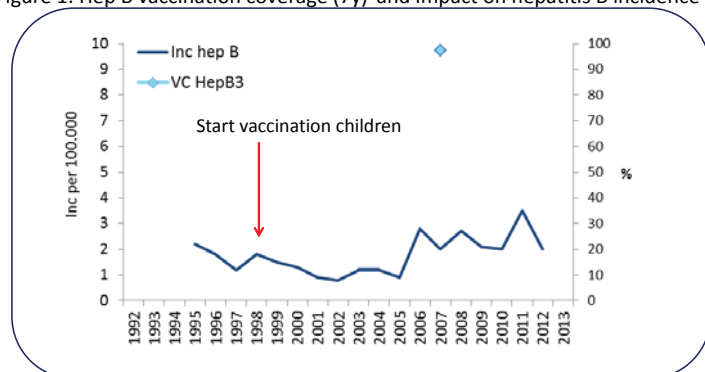
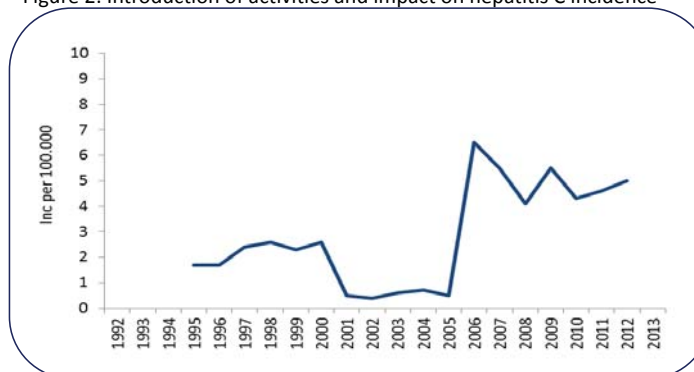


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>i,k</sup>



## Specific issues and future challenges

In Slovenia the National Guidelines for the Management of Viral Hepatitis exist as well as Clinical Guidelines for the Management of HBV and HCV Infections and National Guidelines for the Management of HCV Infection in PWID.

Future actions should be oriented towards improvement of HCV screening in general as well as high risk populations and the implementation of new direct acting antivirals.



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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SPAIN



## Country profile

- Population (in millions) (year): 46,5 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 31 850 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population (16-80 years)	0.7 % (2008-2009) <sup>9</sup>	0.7 % (2007-2010) <sup>1</sup> In working adults
Blood donors (first time)	0.1 % (2007) <sup>d</sup>	0.1 % (2007) <sup>d</sup>
Pregnant women	0.1 % (2004) <sup>c</sup>	0.4 % (2003) <sup>2</sup>
Risk groups		
IDU	7% (1987-2001) <sup>3</sup>	88% (1991-2001) <sup>3</sup>
Migrants	5.9 % (2007) <sup>4</sup>	6.1 % (2007) <sup>4</sup>
Migrant female sex worker	3.5 % (1998-2003) <sup>5</sup>	0.8 % (1998-2003) <sup>5</sup>
HIV infected	-	16.1 % (2008) <sup>6</sup>

## Screening<sup>e</sup>

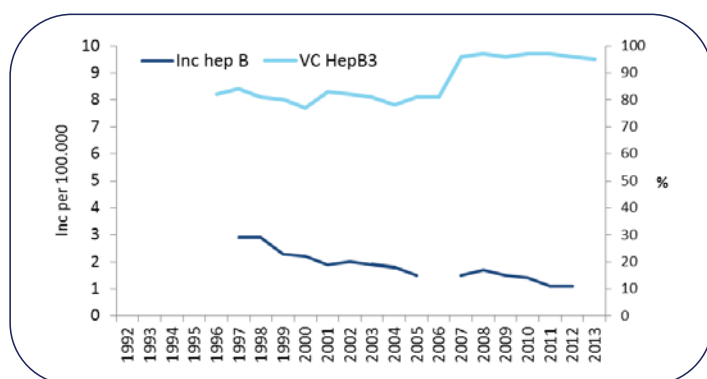
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1975)	Yes (since 1990)
Pregnant women	Yes	Yes
Injecting drug users	No	No
STI clinic patients	Yes	Yes
Haemodialysis patients	Yes	Yes
Health care workers	Yes (since '80s)	Yes (since '90s)
Men having sex with men	Yes	Yes
Prison population	Yes	Yes
Migrants	No	No
Others	Occupational risk	Occupational risk

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence<sup>j,k</sup>



## Vaccination programs

Hepatitis A <sup>7</sup>		Target	Since/Period
Universal	No*		
Risk group	Yes	Travellers, haemophilia patients; chronic liver disease, transplant candidates, contacts hep A case, HIV infected, IDU, MSM, occupational risk	≤1997; 2004
Hepatitis B <sup>e,h</sup>			
Universal	Yes	Newborn Adolescent (12y)	1996-ongoing 1992-ongoing
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, others	

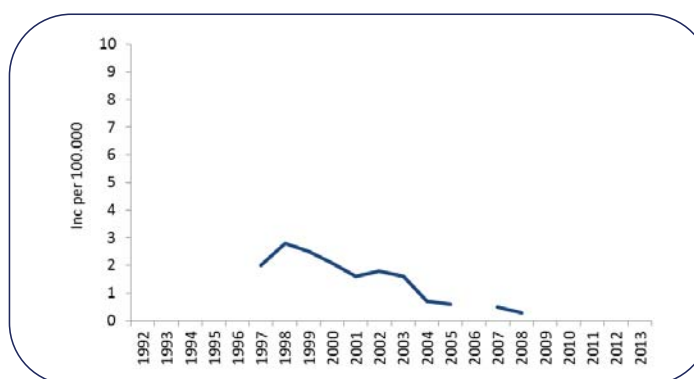
\*included at regional level in Catalonia

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes
Hepatitis C	Yes
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	NA
Number of patients treated for hepatitis C	9800 (2011) <sup>8</sup>

\*included on the national essential medicines list or subsidized by the government

Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>j,k</sup>



## Specific issues and future challenges

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SWEDEN



## Country profile

- Population (in millions) (year): 9,6 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 44 660 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population (adults)	0.2 % (1991-2013) <sup>c*1</sup>	0.5 % (1991-2013) <sup>c*2</sup>
Blood donors (first time)	0.03 % (2013) <sup>d*3</sup>	0.05 % (2013) <sup>d*3</sup>
Pregnant women	-	-
Risk groups		
Injecting drug users	2.3 % (2006) <sup>1</sup>	88 % (2008) <sup>2</sup>
Men having sex with men	-	0.5 % (2012) <sup>3</sup>
Health care workers	-	0.7 % (1993) <sup>4</sup>
Haemodialysis and transplant	-	8 % (1996) <sup>5</sup>

## Screening<sup>e</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (1970)	Yes (1991)
Pregnant women	Yes (2005)	No
Injecting drug users	No <sup>*3</sup>	No <sup>*3</sup>
STI clinic patients	No <sup>*3</sup>	No <sup>*3</sup>
Haemodialysis patients	Yes (1970)	Yes (1991)
Health care workers	No <sup>*3</sup>	No <sup>*3</sup>
Men having sex with men	No <sup>*3</sup>	No <sup>*3</sup>
Prison population	No <sup>*3</sup>	No <sup>*3</sup>
Migrants	No	No
Others	No	No

## National plan

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, chronic liver disease, outbreaks	
Hepatitis B <sup>e,h</sup>			
Universal	No <sup>*4</sup>	Yes in 10 regions, reduced costs in additional 3 regions, 67 % of all new born in 2013 are fully vaccinated	See comments
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, multiple sex partners, MSM, IDU, prisoners, children with parents from endemic countries, contacts HBsAg+ patient	2005

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (2009)
Hepatitis C	Yes (2014) <sup>6</sup>
Drugs available for hepatitis C treatment <sup>*f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	(Yes) not in use
Boceprevir	(Yes) not in use
Simeprevir	Yes
Sofosbuvir	Yes
Others: (specify)	
Daclatasvir	Yes
Ledipasvir	Yes dec 2014
AbbiVie 3D	Yes Jan 2015
Number of patients treated for hepatitis B	350 during 2013
Number of patients treated for hepatitis C	280 during 2013 will increase more than twice in the near future

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Yearly incidence/100,000 of newly reported hepatitis C cases <sup>\*5</sup>

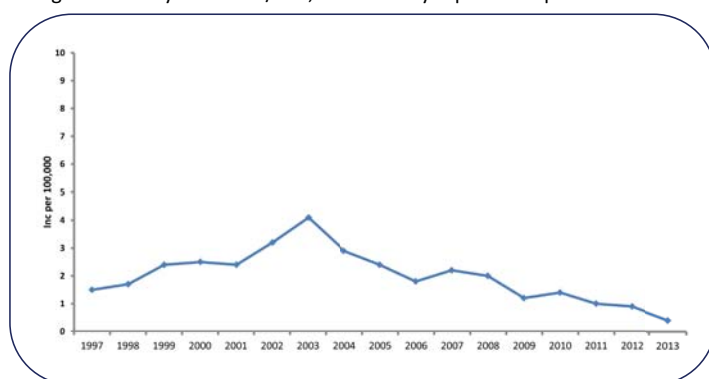
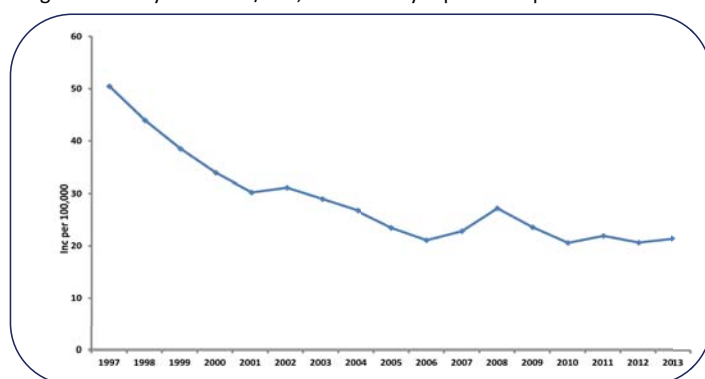


Figure 2: Yearly incidence/100,000 of newly reported hepatitis C cases <sup>\*5</sup>



## Specific issues and future challenges

See extra slides and add what you think is relevant. I do not know from where you have got the figures 1 and 2. Please look at the last slide.

Country contact: : **Maria Axelsson**, Epidemiologist, Microbiologist, Unit for Epidemiology & Health Economics, Public Health Agency of Sweden [www.folkhalsomyndigheten.se](http://www.folkhalsomyndigheten.se) and **Heléne Norder** Ass Prof, Dep of Clinical Microbiology-Virology, Sahlgrenska University Hospital, Gothenburg, Sweden [helene.norder@gu.se](mailto:helene.norder@gu.se)

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### Extra information

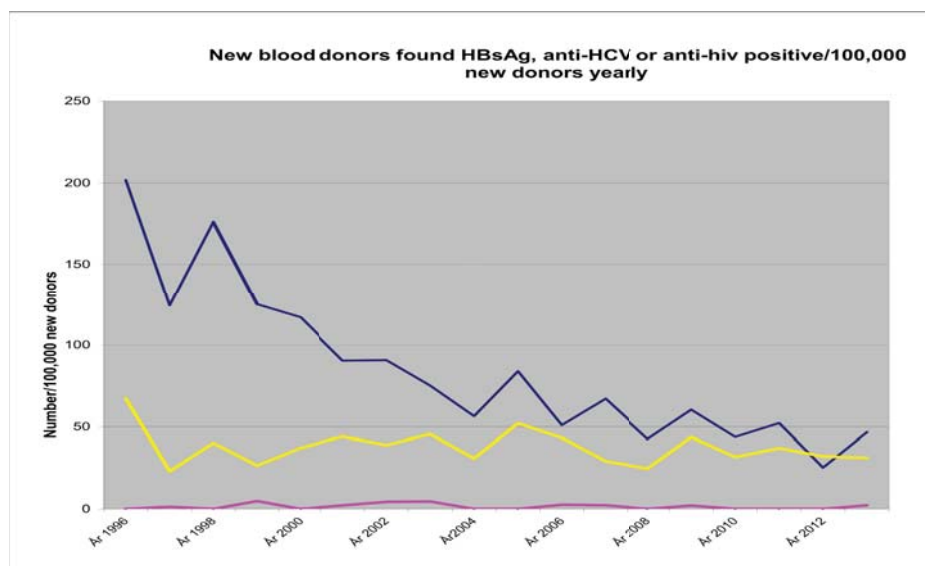
\*1 = There are approximately 20 000 chronically infected individuals in Sweden. They are relatively young, and many are immigrants from endemic countries in Africa, Asia, Balkan states and Middle East.

\*2= In Sweden there are approximately 55 000 individuals with diagnosed hepatitis C, among those 20 % have deceased, and some of the remaining have cleared the infection and have only anti-HCV and not HCV RNA. In addition approximately 10 000 individuals may have unnoticed hepatitis C. This together makes an estimate of 45 000 hepatitis C infected individuals in Sweden, which gives a prevalence of 0.5 %.

Yearly are about 2,000 newly discovered hepatitis C cases identified, 20-25 % of them are only positive for anti-HCV, and have thus cleared the infection. About 1,000 hepatitis C infected individuals die yearly.

Most infected are males (67 %) and born in the 1950-1960ies. In this age group approximately 1.5 % of the males and 1 % of the females are infected. 85 % of all infected are born in Sweden. The prevalence is very high among injecting drug users, and about 80 % get infected after a few years of drug use. Among the younger age groups there are round 700 individuals aged 15-29 reported newly infected with hepatitis C yearly.

Data kindly obtained from Dr Ann-Sofi Duberg, School of Health and Medical Sciences, Örebro University, Örebro, Sweden



The high number of anti-HCV positive donors the first years may be due to the use of first generation of anti-HCV assays

Figure kindly obtained from Dr Bengt Ekermo, University Hospital Linköping, Department of Clinical and Experimental Medicine (IKE), Sweden, Transfusion Medicine

\*3

There are recommendations for hepatitis B vaccination for these groups of patients. It is however voluntary screening and vaccination. There have been programs to identify injecting drug users for screening and for offering vaccination between 1988 and 1999 and between 2001 and 2002, and where needle exchange programmes are in place the users are offered screening and vaccination.

In the prisons and for those in custody screening for hepatitis B, C and hiv is offered together with vaccination against hepatitis B. Only round 30 % accept screening and vaccination (data from 2010).

Health care workers are offered vaccination if they are working with "risk" patients or materials, or if there has been a needle accident. Most are now vaccinated during their medical studies.

\*4

A universal vaccination programme is now to be decided by the Swedish government, hopefully during next spring. Since it has taken a long time to get this through, several regions of Sweden have introduced universal hepatitis B vaccination. Sweden is subdivided into 21 regions, each with its own public health authority. During the two last years, there is universal vaccination to all new born children in 10 of these regions, in additional three regions the parents are offered to vaccinate their children for a reduced fee. The remaining eight regions vaccinate only risk groups according to the recommendations, but several are very liberate when vaccination children with contacts to persons from endemic countries. In total has this resulted in a vaccination coverage of 67 % of all children born during 2013.



# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF SWITZERLAND



## Country profile

- Population (in millions) (year): 8,1 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 80 950 (2012)<sup>b</sup>
- Most recent seroprevalence data: *no seroprev. study in general population*

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	0.1 % (2008) <sup>d</sup>	0.08 % (2008) <sup>d</sup>
Pregnant women	1.2 % (2001) <sup>c</sup>	0.7 (1991) <sup>10</sup>
Risk groups		
Injecting drug users	4 % (1996) <sup>1</sup>	78.3 % (2000-2002) <sup>2</sup>
Men having sex with men	-	0.8 % (2009-2010) <sup>3</sup>
Migrants	8 % (2013) <sup>4</sup>	-
Dialysis patients	1.6% (1999)	5 % (1999) <sup>5</sup>

## Screening

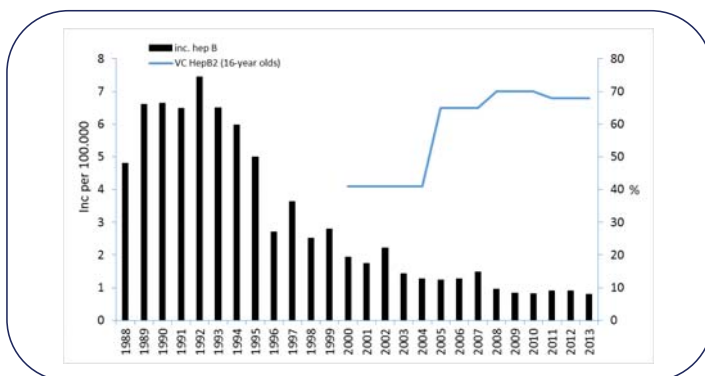
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year 1980) <sup>f</sup>	Yes (since year 1990) <sup>f</sup>
Pregnant women	Yes (since 1996)	No
Injecting drug users	Yes	Yes
STI clinic patients	No	No
Haemodialysis patients	Yes	Yes
Health care workers	No	No
Men having sex with men	No	No <sup>3</sup>
Prison population	Yes	Yes
Migrants	No <sup>4</sup>	No
Others		

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on hepatitis B incidence\*



\*based on mandatory reporting of acute cases

## Vaccination programs

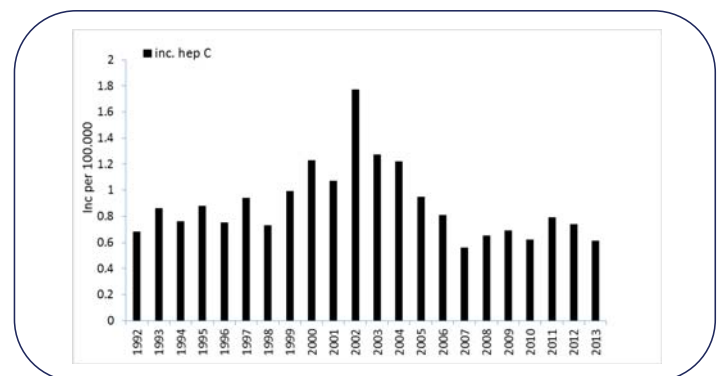
Hepatitis A		Target	Since/Period
Universal	No		
Risk group <sup>6</sup>	Yes	Travellers, IDU, MSM, chronic hepatitis	2000
Hepatitis B			
Universal <sup>h</sup>	Yes	Adolescent (11-15y)	1998-ongoing
Catch-up	yes	Any age unless there is no risk of exposure	
Risk group <sup>7</sup>	Yes	HCV, IDU, haemophiliac, hemodialysis, newborns of HBsAg mothers, multiple sexual partners, travellers, contacts of HBsAg positive	1981

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (year ?)
Hepatitis C	Yes (2012) <sup>8</sup>
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	yes
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	1100 (2011) <sup>9</sup>

\*included on the national list of drugs reimbursed by mandatory health insurance

Figure 2: Introduction of activities and impact on hepatitis C incidence\*



## Specific issues and future challenges

Vaccination coverage at age 16 is on national average 70% and has resulted in a 70% decrease in incidence in the vaccinated cohorts, .

Ongoing transmission of HCV in IDUs, despite information campaigns among users and professionals, remains the main challenge.

Targeted screening for chronic hepatitis B and C based on exposure risk, is recommended.

Approaches to insure timely detection, counselling, follow-up and treatment of HCV is being discussed

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF TAJIKISTAN



## Country profile

- Population (in millions) (year): 8,16 (2014)<sup>3</sup>
- Gross national income per capita (int \$) (year): 2500 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors (first time)	3.0 % (2007-2009) <sup>1</sup>	2.9 % (2007-2009) <sup>1</sup>
Pregnant women	-	0.5 % (2007-2008) <sup>1</sup>
Risk groups		
IDU	-	33 % (2009) <sup>1</sup>
Sex workers	-	6.3 % (2009) <sup>1</sup>

## Screening<sup>f</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (2000) <sup>4</sup>	Yes (2000) <sup>4</sup>
Pregnant women	Yes (2000) <sup>4</sup>	Yes (2000) <sup>4</sup>
Injecting drug users	-	-
STI clinic patients	-	-
Haemodialysis patients	Yes (2000) <sup>4</sup>	Yes (2000) <sup>4</sup>
Health care workers	Yes (2000) <sup>4</sup>	Yes (2000) <sup>4</sup>
Men having sex with men	-	-
Prison population	-	-
Migrants	Yes (2011) <sup>5</sup>	Yes (2011) <sup>5</sup>
Others	-	-

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence<sup>2</sup>

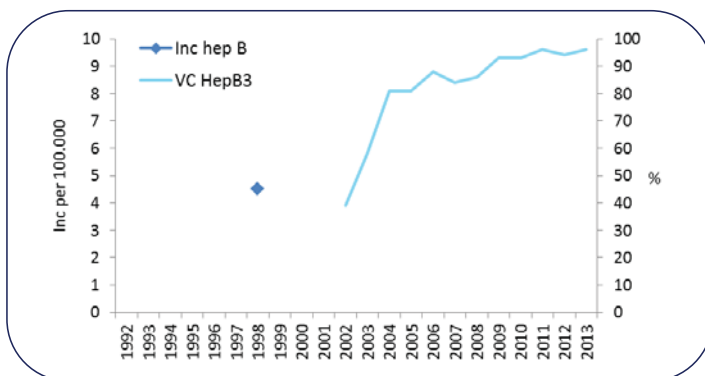
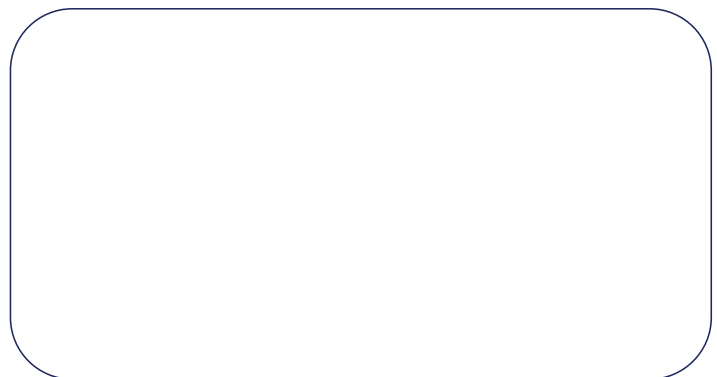


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	No		
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2003-ongoing
Catch-up	-		
Risk group	Yes	Health care workers	2012-ongoing

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	No
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	N/A
Number of patients treated for hepatitis C	N/A

\*included on the national essential medicines list or subsidized by the government

## Specific issues and future challenges

## References

### Country specific references

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

## Country profile

- Population (in millions) (year): 2,1 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 11 520 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors	1.0 % (2008) <sup>1</sup>	0.2 % (2008) <sup>1</sup>
Pregnant women	-	-
Risk groups		
Dialysis patients	1.7 % (2005) <sup>2</sup>	44 % (2006) <sup>3</sup>

## Screening<sup>f</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?)	Yes (since year?)
Pregnant women	?	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis. <sup>f</sup>

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2004-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes (year ?)
Hepatitis C	Yes (year?)
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage <sup>i</sup> and impact on hepatitis B incidence<sup>4</sup>

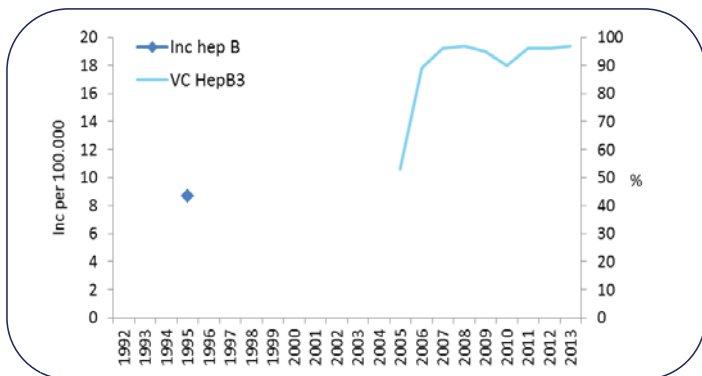
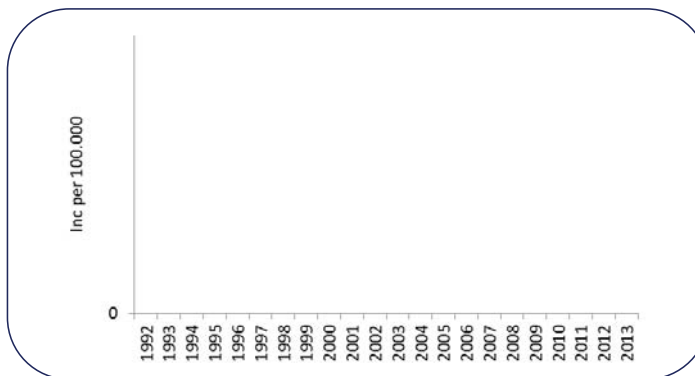


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

To complete by country if wanted.....

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF TURKEY



## Country profile

- Population (in millions) (year): 76,7 (2014)<sup>a</sup>
- Gross national income per capita (in US\$) (year): 18 760 (2014)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	4,57% (1999-2009) <sup>9</sup> 4,19% (1991-2004) <sup>10</sup>	0,38% (1991-2004) <sup>10</sup>
Blood donors	1.07 % (1996-2010) <sup>2</sup> 2,1% (1998-2000) <sup>11</sup>	0.3 % (1996-2010) <sup>2</sup> 0,4% (1998-2000) <sup>11</sup>
Pregnant women	1.7 % (2012) <sup>3</sup>	0.08 % (2012) <sup>3</sup>
Risk groups		
IDU	2.9 % (2006-2007) <sup>2</sup>	5.3 % (2008) <sup>2</sup>
Men having sex with men	3.6 % (2006-2007) <sup>2</sup>	-
Sex workers	2.4 % (2006-2007) <sup>2</sup>	-
Health care workers	2.9 % (1998-2000) <sup>4</sup>	0.3 % (1998-2000) <sup>4</sup>
Asylum seekers	6.4 % (2008) <sup>5</sup>	4.5 % (2008) <sup>5</sup>
Haemodialysis patients	-	28 % (2005) <sup>6</sup>
HCW	3% (1998-2000) <sup>11</sup>	0,3% (1998-2000) <sup>11</sup>

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since 1993) <sup>7</sup>	Yes (1997) <sup>6</sup>
Pregnant women	?	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	Sex workers <sup>6</sup>	?

## Vaccination programs

Hepatitis A <sup>g</sup>	Yes/No	Target	Since/Period
Universal	Yes/No	Children	Until end 2012
Risk group	No		
Hepatitis B			
Universal <sup>h</sup>	Yes	Infant	1998-ongoing
Catch-up <sup>7</sup>	Yes	School aged children (8 to 17y)	2005-2009
Risk group <sup>7,8</sup>	Yes	Haemodialysis patients, occupational risk, HCW, IDU, high-risk sexual behaviour, contacts HBsAg+, persons residing in orphanages and detention centres	1998

## Treatment

National guidelines for clinicians available <sup>f</sup>	Yes (year ?)
Hepatitis B	Yes year?
Hepatitis C	Yes year?
Drugs available for hepatitis C treatment <sup>*,f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	4200 (2011) <sup>8</sup>

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focusses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, and prevention of transmission in health-care settings.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>i</sup> and impact on acute hepatitis B incidence<sup>7</sup>

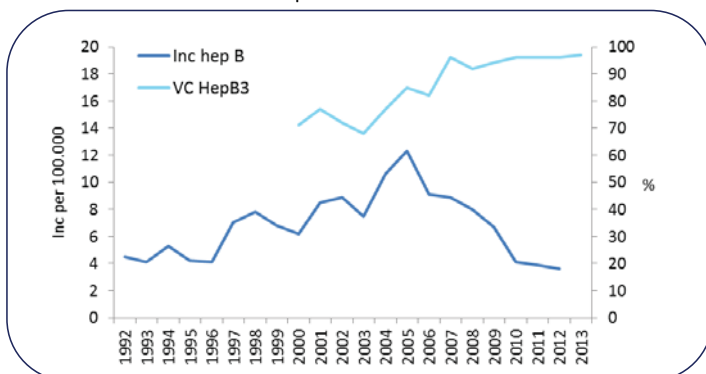


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

Country contact: **Prof. Dr. Selim Badur**, University of Istanbul - Faculty of Medicine, Dept Virology,  
[selimbadur@hotmail.com](mailto:selibadur@hotmail.com)

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF TURKMENISTAN

## Country profile

- Population (in millions) (year): 5,2 (2014)
- Gross national income per capita (int \$) (year): 12 920 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	-	-
Blood donors	-	-
Pregnant women	-	-
Risk groups	-	-

## Screening

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	?	?
Pregnant women	?	?
Injecting drug users	?	?
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no information available.

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2002-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available	
Hepatitis B	? (if yes, year ?)
Hepatitis C	? (if yes, year?)
Drugs available for hepatitis C treatment*:	
Ribavirin	?
Pegylated interferon	?
Interferon alpha	?
Telaprevir	?
Boceprevir	?
Simeprevir	?
Sofosbuvir	?
Others: (specify)	?
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence<sup>1</sup>

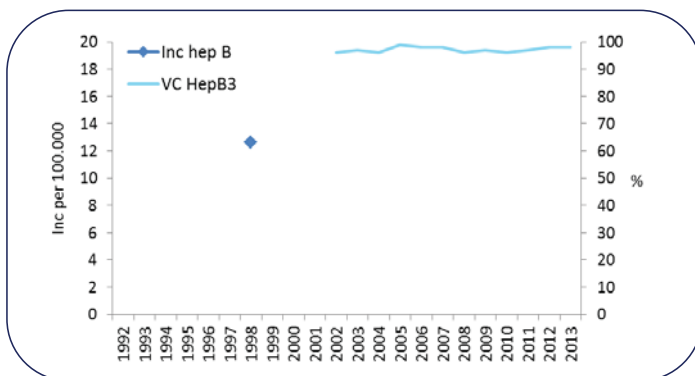
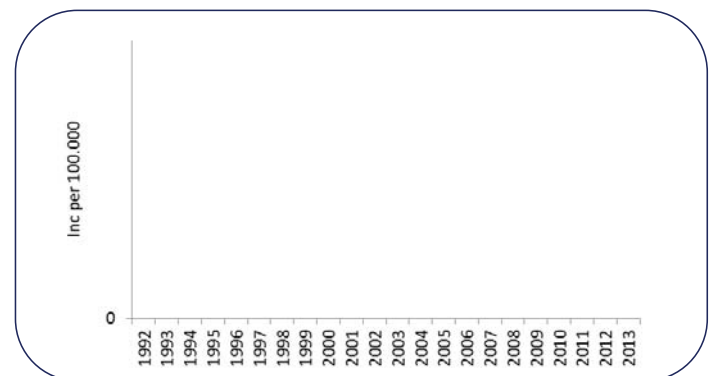


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>2</sup>



## Specific issues and future challenges

To complete by country if wanted.....

Country contact:

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF UKRAINE

## Country profile

- Population (in millions) (year): 45,2 (2011)<sup>f</sup>
- Gross national income per capita (int \$) (year): 8960 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	1.8 % (2007-2008) <sup>1</sup>	12.6 % (2007-2008) <sup>1</sup>
Blood donors (first time)	0.8 % (2007-2008) <sup>1</sup>	1.3 % (2007) <sup>1</sup>
Pregnant women	1.2 % (2007-2008) <sup>1</sup>	3.1 % (2006-2007) <sup>1</sup>
Risk groups		
IDU	6.7 % (2004) <sup>1</sup>	73 % (2005) <sup>1</sup>
Sex workers	9.1 % (2007) <sup>1</sup>	32 % (2007) <sup>1</sup>
Men having sex with men	9.8 % (2007) <sup>1</sup>	20 % (2007) <sup>1</sup>

## Screening<sup>f</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?)	Yes (since year?)
Pregnant women	?	?
Injecting drug users	No	No
STI clinic patients	?	?
Haemodialysis patients	?	?
Health care workers	?	?
Men having sex with men	?	?
Prison population	?	?
Migrants	?	?
Others	?	?

## National plan

There is no written national strategy or plan that focusses exclusively or primarily on the prevention and control of viral hepatitis.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence<sup>2</sup>

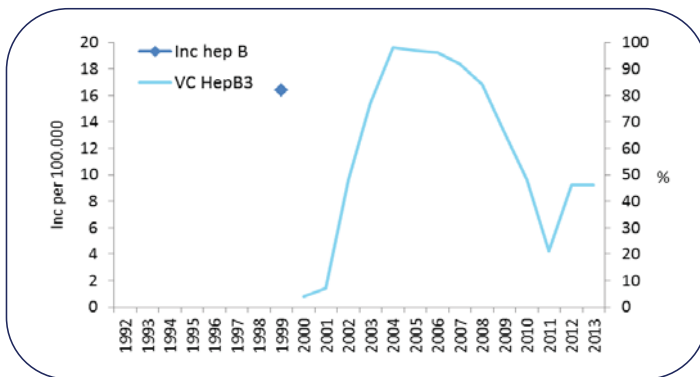
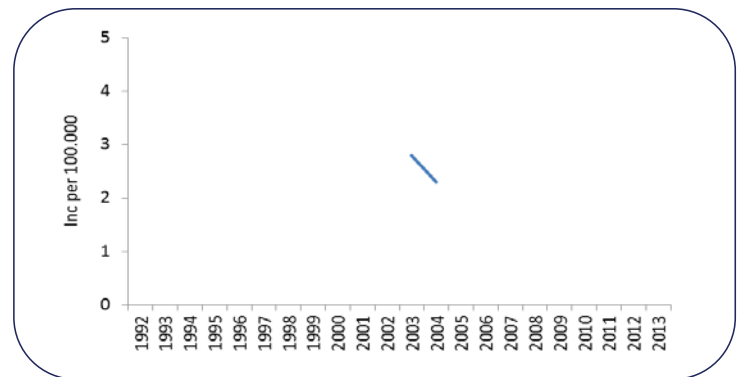


Figure 2: Introduction of activities and impact on hepatitis C incidence<sup>3</sup>



## Specific issues and future challenges

To complete by country if wanted.....

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes ?	Please specify...	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn	2000-ongoing
Catch-up	?		
Risk group	Yes ?	Please specify...	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF THE UNITED KINGDOM



## Country profile

- Population (in millions) (year): 64,3 (2014)<sup>a</sup>
- Gross national income per capita (int \$) (year): 35 760 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population (adults)	0.2% (2009) <sup>A</sup>	0.5 % (2014) <sup>B</sup>
Blood donors (first time)	0.03 % (2008) <sup>d</sup>	0.03 % (2008) <sup>d</sup>
Pregnant women	1.0 % (2002) <sup>c</sup>	0.3 % (2000/2004) <sup>C/D</sup>
Risk groups		
IDU	-	54 % (2014) <sup>B</sup>
Female sex workers	0.6 % (2011) <sup>3</sup>	0.2 % (2011) <sup>3</sup>
MSM	-	2.1 % (2008-2009) <sup>4</sup>
Migrants (Asia)	5.5 % (2012) <sup>5</sup>	2.0 % (2009/2013) <sup>5/E</sup>
Female prisoners	-	40 % (2013) <sup>F/G</sup>
Health care workers	-	0.3 % (1994-1997) <sup>8</sup>

## Screening<sup>e</sup>

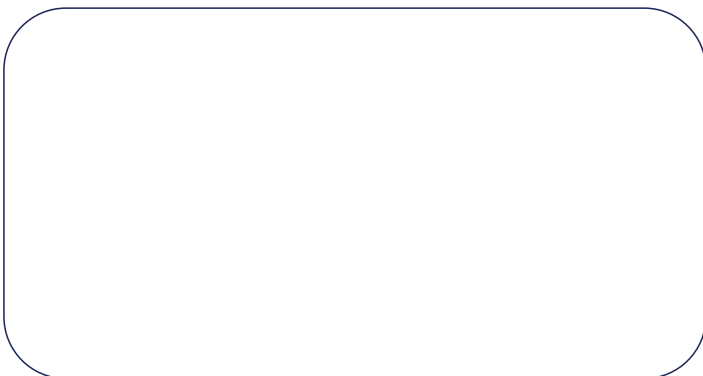
Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes	Yes
Pregnant women	Yes	No
Injecting drug users	Yes	Yes
STI clinic patients	No	No
Haemodialysis patients	Yes	Yes
Health care workers	Yes	Yes
Men having sex with men	No	Yes
Prison population	Yes	Yes
Migrants	Yes	Yes
Others	Occupational risk	Occupational risk

## National plan

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis C.<sup>f</sup>

## Impact

Figure 1: Introduction of activities and impact on hepatitis B incidence <sup>i,k</sup>



## Vaccination programs

Hepatitis A <sup>g</sup>		Target	Since/Period
Universal	No		
Risk group	Yes	Travellers, chronic liver disease, haemophilia patients, MSM, IDU, occupational risk	1980s
Hepatitis B <sup>e,h</sup>			
Universal	No		
Risk group	Yes	Neonates born to HBsAg+ mothers, occupational risk, haemodialysis patients, chronic liver disease, STI patients, multiple sex partners, IDU, contacts HBsAg+ patient, staff residences for those with learning difficulties, travellers	1980s

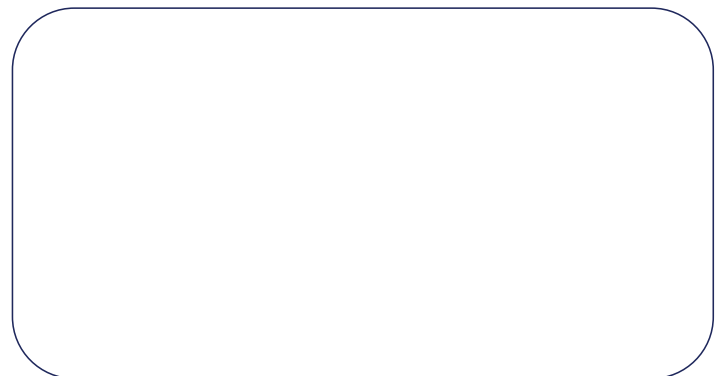
## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	No
Hepatitis C	No
Drugs available for hepatitis C treatment <sup>**f</sup>	
Ribavirin	Yes
Pegylated interferon	Yes
Interferon alpha	Yes
Telaprevir	Yes
Boceprevir	Yes
Simeprevir <sup>**</sup>	Yes
Sofosbuvir <sup>**</sup>	Yes
Others: (specify)	
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\* Included on the national essential medicines list or subsidized by the government

\*\* Limited availability as at late 2014

Figure 2: Introduction of activities and impact on hepatitis C incidence <sup>i,k</sup>



## Specific issues and future challenges

Incidence data for hepatitis in general reports of European and other organisation are mostly not representative for the general population in the UK

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# PREVENTION AND CONTROL OF VIRAL HEPATITIS IN EUROPE IN 2014: THE CASE OF UZBEKISTAN



## Country profile

- Population (in millions) (year): 31,0 (2014)<sup>f</sup>
- Gross national income per capita (int \$) (year): 5340 (2013)<sup>b</sup>
- Most recent seroprevalence data:

	% HBsAg + (year)	% Anti-HCV + (year)
General population	13.3 % (1999-2000) <sup>1</sup>	13.1 % (1999-2000) <sup>1</sup>
Blood donors	4,7 % (2014) <sup>2</sup>	2,7% (2014) <sup>2</sup>
Pregnant women	-	-
Risk groups		
IDU	-	36 % (2007) <sup>1</sup>
Sex workers	9.1 % (2007) <sup>1</sup>	12.8 % (2005) <sup>1</sup>

## Screening<sup>f</sup>

Recommended for following groups:	Hep B	Hep C
Blood and organ donors	Yes (since year?)	Yes (since year?)
Pregnant women	4,3	4,5
Injecting drug users	3,5	2,8
STI clinic patients	2,1	1,5
Haemodialysis patients	15,4	17,7
Health care workers	4,5	2,7
Men having sex with men	0	0
Prison population	-	-
Migrants	0,5	0,7
Others	0,3	0,2

## Vaccination programs

Hepatitis A		Target	Since/Period
Universal	No		
Risk group	Yes	Vulnerable children <7yo	
Hepatitis B			
Universal <sup>h</sup>	Yes	Newborn, with DPT+Hib (from 2009)	1998-ongoing
Catch-up	No		
Risk group	Yes	Health workers	

## Treatment

National guidelines for clinicians available <sup>f</sup>	
Hepatitis B	Yes
Hepatitis C	Yes
Drugs available for hepatitis C treatment* <sup>f</sup>	
Ribavirin	No
Pegylated interferon	No
Interferon alpha	No
Telaprevir	No
Boceprevir	No
Simeprevir	No
Sofosbuvir	No
Others: (specify)	No
Number of patients treated for hepatitis B	?
Number of patients treated for hepatitis C	?

\*included on the national essential medicines list or subsidized by the government

## National plan

There is a written national strategy or plan that focusses primarily on the prevention and control of viral hepatitis. It includes components for vaccination, prevention in general and prevention of transmission in health-care settings.<sup>f</sup>

## Impact

Figure 1: Hepatitis B vaccination coverage<sup>1</sup> and impact on hepatitis B incidence<sup>2</sup>

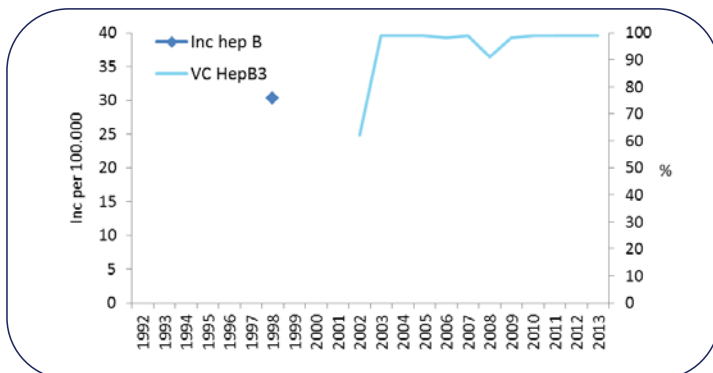


Figure 2: Introduction of activities and impact on hepatitis C incidence



## Specific issues and future challenges

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