ELIMINATION OF HBV AND HCV

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DEFINITIONS

Control, Elimination, Eradication of HBV/HCV

- To control HCV/HBV: To decrease incidence of new infections, cirrhosis and HCC
- To eliminate HCV/HBV: Zero or near zero incidence of new infections with major reduction in the incidence of cirrhosis, HCC and deaths in a <u>specific area</u>
- To eradicate HCV/HBV: Zero or near zero incidence of new infections with major reduction in the incidence of cirrhosis, HCC and deaths at global level

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EPIDEMIOLOGICAL UPDATE

Cumulated incidence of chronic HBV infection, 2015 (prevalence of HBsAg in children under 5 years) after the use of the vaccine by WHO region: about 1.3% of under-5 children have developed chronic HBV infection

Prevalence of HBsAq (%)

		, , , , , , , , , , , , , , , , , , ,			
		Uncertainty intervals			
Map key	Best	Lower	Higher		
	3.0	2.0	4.7		
	0.2	0.1	0.5		
	1.6	1.2	2.1		
	0.4	0.2	0.8		
	0.7	0.5	1.6		
	0.9	0.6	1.3		
	1.3	0.9	2.2		
		Map key Best 3.0 0.2 1.6 0.4 0.7 0.9	Map key Best Lower 3.0 2.0 0.2 0.1 1.6 1.2 0.4 0.2 0.7 0.5 0.9 0.6		

Source: WHO, work conducted by the London School of Hygiene & Tropical Medicine (LSHTM). See Annex 2.

Prevalence of HBV infection (HBsAg) in the general population by WHO region, 2015: the WHO African and Western Pacific regions have the highest prevalence and the largest number of persons living with HBV

Estimates of the prevalence of HBV infection (%)

Estimated number of persons living with HBV (millions)

		Uncertainty	Uncertainty interval (95%)			
WHO region	Best	Lower	Higher	Best	Lower	Higher
African Region	6.1	4.6	8.5	60	45	84
Region of the Americas	0.7	0.4	1.6	7ª	4	16
Eastern Mediterranean Region	3.3	2.6	4.3	21	17	28
European Region	1.6	1.2	2.6	15	11	23
South-East Asia Region	2.0	1.5	4.0	39	29	77
Western Pacific Region 6.2		5.1	7.6	115	93	140
Total	3.5	2.7	5.0	257	199	368

Source: WHO, work conducted by the London School of Hygiene & Tropical Medicine (LSHTM). See Annex 2.

Incidence of HCV infection in the general population, by WHO region, 2015: 1.75 million new infections in 2015

Incidence of HCV infection

		Incidence ra	te (per 100 000)	Total number (000)		
WHO region	Map key	Best estimate	Uncertainty interval	Best estimate	Uncertainty interval	
African Region	•	31.0	22.5-54.4	309	222-544	
Region of the Americas		6.4	5.9-7.0	63	59-69	
Eastern Mediterranean Region		62.5	55.6-65.2	409	363-426	
European Region		61.8	50.3-66.0	565	460-603	
South-East Asia Region		14.8	12.5-26.9	287	243-524	
Western Pacific Region	401	6.0	5.6-6.6	111	104–124	
Global		23.7	21.3-28.7	1 751	1 572-2 120	

Source: WHO, work conducted by the Center for Disease Analysis. See Annex 2.

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Prevalence of HCV infection (HCV RNA positive) in the general population, by WHO region, with uncertainty intervals, 2015: 71 million living with HCV worldwide

Estimates of the prevalence of HCV infection (%)

Estimated number of persons living with HCV (millions)

		p			,			
Uncertainty interval				Uncertainty interval				
WHO region	Best	Lower	Higher	Best	Lower	Higher		
African Region	1.0	0.7	1.6	11	7	16		
Region of the Americas	0.7	0.6	0.8	7	6	8		
Eastern Mediterranean Region	2.3	1.9	2.4	15	13	15		
European Region	1.5	1.2	1.5	14	11	14		
South-East Asia Region	0.5	0.4	0.9	10	8	18		
Western Pacific Region	0.7	0.6	0.8	14	10	15		
Total	1.0	0.8	1.1	71	62	79		

Source: WHO, work conducted by the Center for Disease Analysis. See Annex 2.

The results of the global prevalence study were published in Lancet Gastroenterology and Hepatology

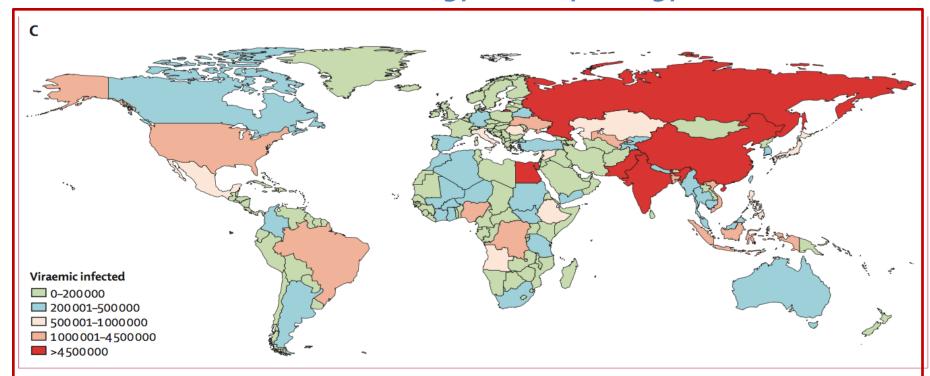


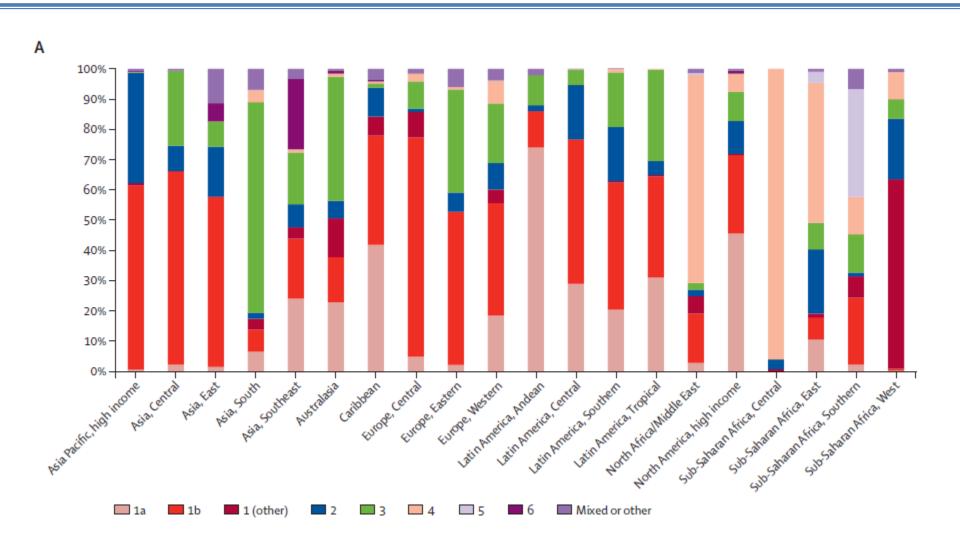
Figure 1: HCV prevalence estimates (end of 2015)

2015 viraemic prevalence in countries with approved or estimated models (A), viraemic prevalence in all countries (B), and number of viraemic infected people in all countries (C). HCV=hepatitis C virus.

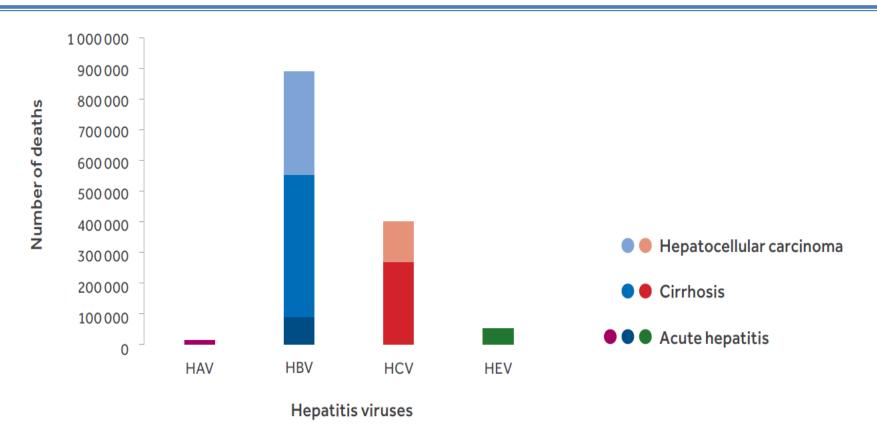
The global prevalence of viremic HCV was 1.0% (95% uncertainty interval 0.8-1.1) in 2015, or 71.1 million (62.5–79.4) viremic infections.

- The Polaris Observatory HCV Collaborators, Blach S, Zeuzem S, et al. Global prevalence and genotype distribution of hepatitis C virus infection in 2015: a modelling study. The Lancet Gastroenterology & Hepatology 2016; **Under Review**.

Genotype distribution by GBD region



Deaths from viral hepatitis, by virus and types of sequelae, 2015: most viral hepatitis deaths are due to the late complications of HBV and HCV infection



HAV: hepatitis A virus; HBV: hepatitis B virus; HCV: hepatitis C virus; HEV: hepatitis E virus Source: WHO global health estimates for 2015 published in 2016 (Global Health Estimates 2015: deaths by cause, age, sex, by country and by region, 2000–2015. Geneva: World Health Organization; 2016.)



WHO STRATEGY FOR VIRAL HEPATITIS ELIMINATION

TIMELINE – TOWARDS THE ELIMINATION OF VIRAL HEPATITIS

Global Burden of Disease mortality burden from viral hepatitis is first documented.

2000

First Strategic Advisory Group of Experts (SAGE) recommendation for timely birth dose

First World Blood Donor Day

2004

Global Hepatitis Programme established at WHO following WHA resolution 63.18

2011

A cure is developed — the first directacting antivirals revolutionize hepatitis C treatment.

2013

2014

WHA67.6 resolution asks countries to develop national plans and to include civil society and asks WHO "to examine the feasibility of elimination of HBV and HCV with a view to setting targets".

WHO publishes
Guidelines for the
prevention, care and
treatment of persons
with chronic hepatitis C
infection.

PREVENTION BEGINS

PREVENTION IS STRENGTHENED AND TREATMENT IMPROVED

1992

First ever Harm Reduction

1990

International

Conference

First WHO Resolution on hepatitis B vaccine

2010

First World Health Assembly Resolution on viral hepatitis – World Hepatitis Day an official WHO day

2001

The first HBV vaccines funded by GAVI

1999

Launch of WHO's Safe Injection Global Network (SIGN)

2013

World Hepatitis Alliance and WHO launch the Global policy report on the prevention and control of viral hepatitis.

2012

WHO publishes Guidance on prevention of HBV and HCV infection among PWID.

Civil society advocacy – World Hepatitis Alliance establishes official relations with WHO.

2014

WHO Director-General forms first Hepatitis Scientific and Technical Advisory Committee (STAC).

WHO prequalifies the first enzyme immunoassay (EIA) for detection of HBsAg.

The Regional Action Plan for Viral Hepatitis in the Western Pacific 2016–2020 approved by Member States

OCTOBER **2015**

WHO prequalifies the first EIA for detection of HCV antibodies.

JUNE **2015** Adoption of first global health sector strategy on viral hepatitis "Towards ending viral hepatitis", 2016–2021. Eliminate viral hepatitis as a major public health threat by 2030.

MAY **2016** A Framework for Action 2016–2020 for the prevention, care and treatment of viral hepatitis in the African Region approved by Member States

AUGUST **2016**

WHO prequalifies the first HCV rapid test.

NOVEMBER 2016

First WHO Guidelines on hepatitis B and C testing

FEBRUARY **2017**

GLOBAL ACTION

SEPTEMBER 2015

Glasgow Declaration from the first World Hepatitis Summit

Plan of Action for the Prevention and Control of Viral Hepatitis 2016–2019 in the Region of the Americas approved by Member States

JULY **2016**

NOhep launched on World Hepatitis Day

2016

Regional Action Plan for Hepatitis in the South-East Asia Region approved by Member States

Joint society statement for elimination of viral hepatitis – EASL, APASL, ALEH and AASLD

First update of hepatitis C treatment guidelines with first-ever preferred and alternative direct-acting antiviral (DAA)-based regimen recommended

UN General Assembly Special Session on Drugs

OCTOBER **2016**

Regional Action Plan for the Implementation of the Global Strategy for Viral Hepatitis 2017—2021 for the Eastern Mediterranean Region approved by Member States

APRIL 2017

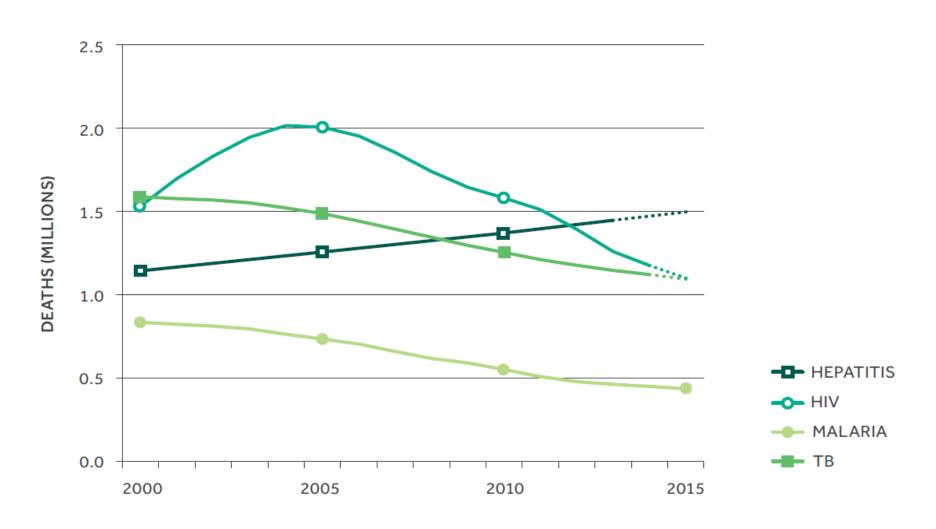
First global hepatitis report with WHO-validated estimates

First-ever WHO *Global report on access to hepatitis C treatment* showed over 1 million persons treated with DAA-based regimens in low- and middle-income countries.

SEPTEMBER 2016

Regional Action Plan for Viral Hepatitis in the European Region approved by Member States First Global Health Sector Strategy on Viral Hepatitis Elimination was approved by WHO General Assembly (May 2016). It is based on previous WHO General Assembly resolutions in 2010 and 2014.

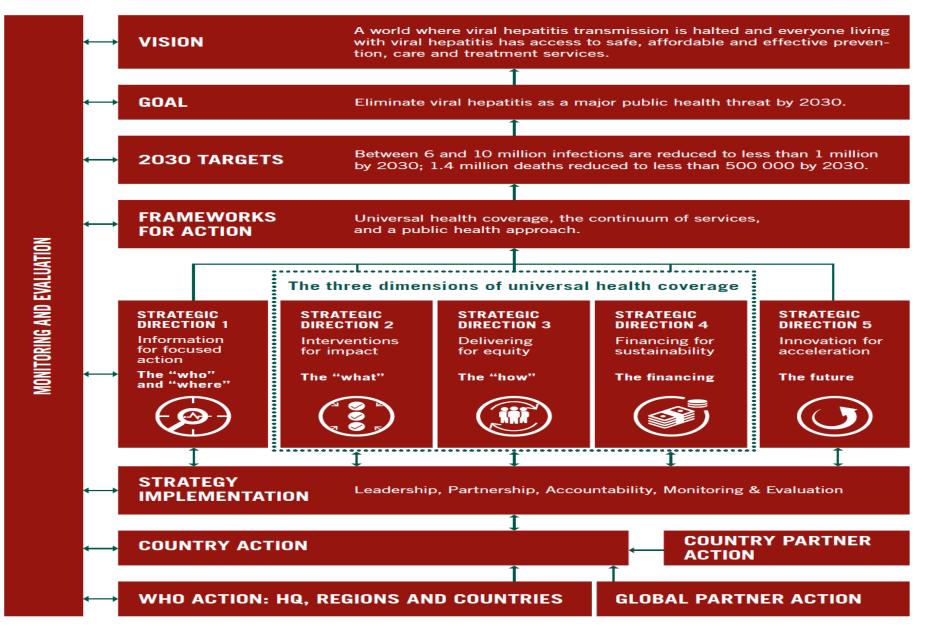
Estimated global number of deaths due to viral hepatitis, HIV, malaria and TB, 2000-2015



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GLOBAL HEALTH SECTOR STRATEGY ON VIRAL HEPATITIS, 2016–2021

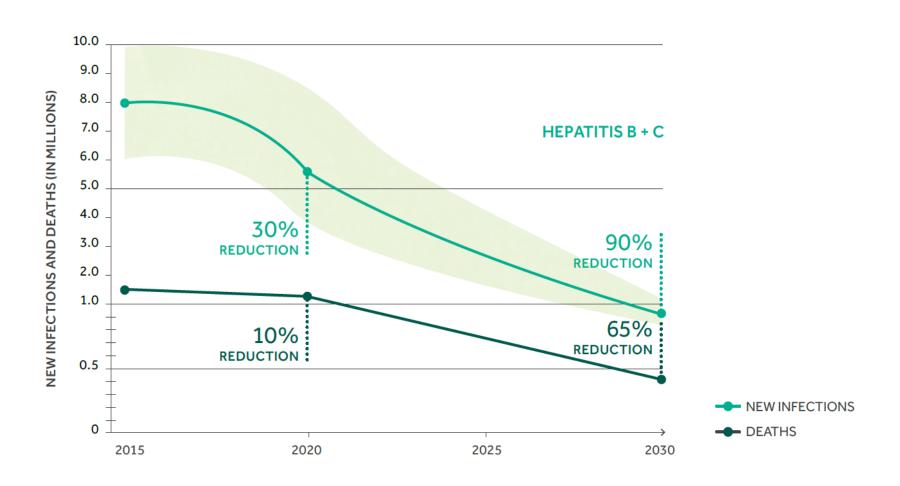
Overview



Vision and Goal

A world where viral hepatitis transmission is halted and everyone living VISION with viral hepatitis has access to safe, affordable and effective prevention, care and treatment services. GOAL Eliminate viral hepatitis as a major public health threat by 2030.

Targets for reducing new cases of and deaths from chronic viral hepatitis B and V infection



Service coverage indicators for the core interventions of the Global Health Sector Strategy (GHSS) on viral hepatitis: 2015 baseline and targets

				Targets		
	Interventions	Indicator	2015 baseline	2020	2030	
1	Hepatitis B vaccination	HEPB3 coverage	84%	90%	90%	
2	HBV PMTCT ^a	HEP vaccine birth dose coverage	39%	50%	90%	
3	Blood safety	Donations screened with quality assurance	97%	95%	100%	
	Injection safety	Proportion of unsafe injections	5%	0%	0%	
4	Harm reduction	Syringes & needles distributed/PWID/year	27	200	300	
5	Testing services	% HBV-infected diagnosed	9%	30%	90%	
		% HCV-infected diagnosed	20%	30%	90%	
	Treatment	% diagnosed with HBV on treatment	8% ^b	_c	80% ^d	
		% diagnosed with HCV started on treatment	7% ^b	_ c	80% ^d	

 $HEPB3: three \ doses \ of \ hepatitis \ B \ vaccine; PMTCT: prevention \ of \ mother-to-child \ transmission;$

PWID: person who injects drugs

 $\textit{Source:} \ WHO, including \ commissioned \ work, United \ Nations, UNICEF \ and \ one \ published \ study \ \textit{(73)}$

a Interventions to prevent the mother-to-child transmission of HBV

b Less than 20% of persons living with HBV infection are eligible for treatment with antinucleos(t)ides available today.

⁵ million treated for HBV and 3 million treated for HCV (cumulative targets)

d Of those eligible for treatment

WHO-EURO Regional Targets up to 2020

- 95% coverage with three-dose HBV vaccine for infants, in countries that implement universal vaccination;
- 90% coverage with interventions to prevent mother-to-child transmission of HBV: hepatitis B birth-dose vaccination or other approaches;
- 100% of blood donations screened using quality assured methods;
- 50% of injections administered with safety-engineered injection devices;³
- at least 200 sterile injection equipment kits distributed per person per year for people who inject drugs, as part of comprehensive package of harm reduction services;⁴
- 50% of people living with chronic HBV and HCV infections are diagnosed and aware of their condition; and
- 75% treatment coverage of people diagnosed with HBV and HCV infections who are eligible for treatment.



Summary of the 2015 baseline estimates of the indicators of the global health sector strategy on viral hepatitis, be region

ANNEX 1. BASELINE ESTIMATES TOWARDS THE TARGETS OF THE GLOBAL HEALTH SECTOR STRATEGY

Table A1. Summary of the 2015 baseline estimates of the indicators of the global health sector strategy on viral hepatitis, by region

			Regional es	timates					Global		Targets required for elimination	
	Interventions	Indicator	African Region	Region of the Americas	Eastern Mediterranean Region	European Region	South- East Asia Region	Western Pacific Region	2015 baseline	2020	2030	
1	Hepatitis B vaccination	HEPB3 coverage	76%	89%	80%	81%	87%	90%	84%	90%	90%	
2	HBV PMTCT [®]	HEP vaccine birth dose coverage	10%	72%	23%	39%	34%	83%	39%	50%	90%	
3	Blood safety	Donations screened with quality assurance	80%	98%	81%	99.9%	85%	98%	97%	95%	100%	
	Injection safety	Proportion of unsafe injections	3.7%	3.4%	14.0%	4.6%	5.2%	3.2%	5% (40)	0%	0%	
4	Harm reduction	Syringes & needles distributed/PWID/year	6	22	25	59	29	57	27	200	300	
5	Testing	% HBV-infected diagnosed	0.3%	10%	2%	13%	3%	2%	9%	30%	90%	
	services	% HCV-infected diagnosed	6%	36%	18%	31%	9%	21%	20%	30%	90%	
	Treatment	% diagnosed with HBV on treatment	N/A	N/A	N/A	N/A	N/A	N/A	8%	_ c	80% ^d	
		% diagnosed with HCV started on treatment	2%	11%	12%	5%	7%	5%	7% ^b	_ c	80% ^d	

HEPB3: three doses of hepatitis B vaccine; PMTCT: prevention of mother-to-child transmission; PWID: person who injects drugs

- a Interventions to prevent the mother-to-child transmission of HBV
- b Less than 20% of persons living with HBV infection are eligible for treatment with antinucleos(t)ides available today.
- 5 million treated for HBV and 3 million treated for HCV (cumulative targets)
- d Of those eligible for treatment



FRAMEWORKS FOR ACTION

Universal health coverage, the continuum of services, and a public health approach.

Strategic Directions 1-5

The three dimensions of universal health coverage

STRATEGIC DIRECTION 1

Information for focused action

The "who" and "where"



STRATEGIC DIRECTION 2

Interventions for impact

The "what"



STRATEGIC DIRECTION 3

Delivering for equity

The "how"



STRATEGIC DIRECTION 4

Financing for sustainability

The financing



STRATEGIC DIRECTION 5

Innovation for acceleration

The future



Strategic Direction 1: "Who and Where"

1.1 Data for Informed Decisions

- Surveillance
- Hepatitis indicators

1.2 Evidence-based National Planning

- National Action Plans
- National Governance Structure
- Monitoring and evaluation mechanisms
- Awareness campaigns and communication strategies



TABLE 2. Summary of indicators for monitoring and evaluation of viral hepatitis B and C

Indicator number		Indicator name	Programmatic area	
C.1	a	Prevalence of chronic HBV infection		
	b	Prevalence of chronic HCV infection	Viral hepatitis	
C.2		Infrastructure for HBV and HCV testing		
C.3	a	Immunization		
	b	Coverage of third-dose hepatitis B vaccine among infants	I mmunization	
C.4		Facility-level injection safety	Injection safety	
C.5		Needle-syringe distribution	HIV, harm reduction	
C.6		People living with HCV and/or HBV diagnosed		
C.7	a	Treatment coverage for hepatitis B patients		
	b	Treatment initiation for hepatitis C patients		
C.8	a	Viral suppression for chronic hepatitis B patients treated	Viral hepatitis	
	b	Cure for chronic hepatitis C patients treated		
C.9	a	-		
	b	Incidence of HCV infection		
C.10		Deaths from hepatocellular carcinoma (HCC), cirrhosis and liver diseases attributable to HBV and HCV infection	Noncommunicable diseases, cancer	

Strategic Direction 2: Interventions for Impact. The "What"

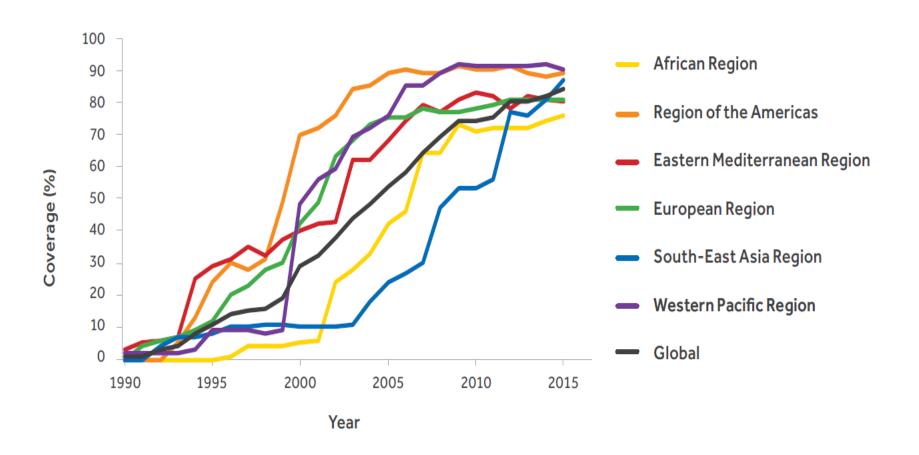
PREVENTION

- 2.1 HBV immunization and prevention of mother-to-child transmission
- 2.2 Blood and Injection Safety
- 2.3 Prevention of Transmissions Associated with Injecting Drug Use
- 2.4 Prevention of Sexual Transmissions (and other sexually transmitted infections)
- 2.5 Ensuring Food and Water Safety

TREATMENT

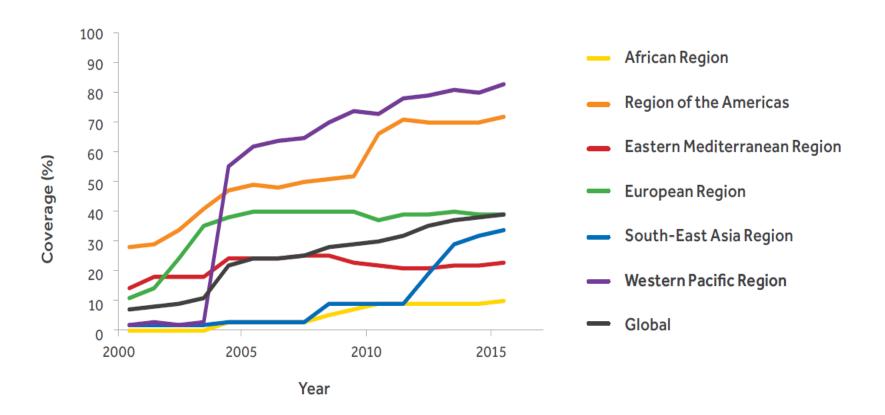
- 2.6 Testing and Treatment: Diagnosing Hepatitis Virus Infections
- 2.7 Enhancing Chronic hepatitis Care and Treatment

Three-dose hepatitis B vaccine coverage, by WHO region, 2000-2015: a major increase in coverage at the beginning of the 21st century



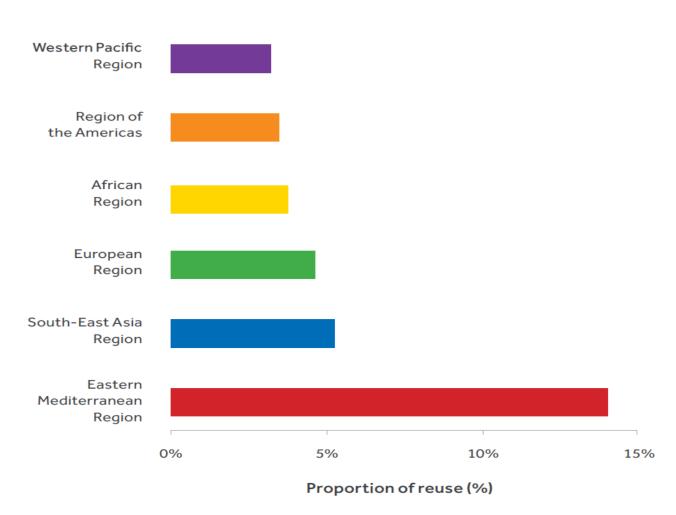
Source: Joint UNICEF-WHO reporting form

Hepatitis B birth dose coverage, by WHO region, 2000-2015: good progress in the Region of the Americas and Western Pacific Region



Source: Joint UNICEF-WHO reporting form

Proportion of health-care injections given equipment reused without sterilization, by WHO region, 2010: problems persist specifically in the Eastern Mediterranean and South-East Asia regions



Source: Pepin at al. (40)

Role of injection drug use in acquisition of new infections, chronic infections and deaths from HBV and HCV, 2015

	New infections			Chronic in	fections		Deaths from cirrhosis and hepatocellular carcinoma			
	Total	Attributable to current injection drug use		Total	Among persons who currently inject (or recently injected) drugs		Total	Attributable to lifetime injection drug use		
	# (million)	# (million)	%	# (million)	# (million)	%	# (000s)	# (000s)	%	
HBV	N/A	N/A	1.2	257	1.3	0.5	890	8.1	0.9	
HCV	1.7	0.39	23.0	71	5.6	8	400	126.0	31.5	

Source: Calculation based on published data (107, 108) (see Annex 2 at the end of this report).

Size of the population injecting drugs and harm reduction indicators, by region: major gaps towards targets of the global strategy

WHO region	Size of the p	opulation inje	cting drugs	Proportion of countries	Needle and syringe distribution ^c (93)		
	Number ^a (millions)	Prevalence (%) in the population 15-64 years	Proportion of countries reporting data on PWID (%)	with needle and syringe programmes (%) ^b	% of countries with data ^d	Median # of syringes/ PWID/ year ^e	
African Region	0.52	0.1	30	11	2	6	
Region of the Americas	2.75	0.42	34	26	9	22	
Eastern Mediterranean Region	0.92	0.23	43	38	14	25	
European Region	3.97	0.66	92	91	58	59	
South-East Asia Region	0.56	0.04	82	55	55	29	
Western Pacific Region	3.03	0.23	33	33	26	57	
World	11.75 ^f	0.25	53	36	26	27	

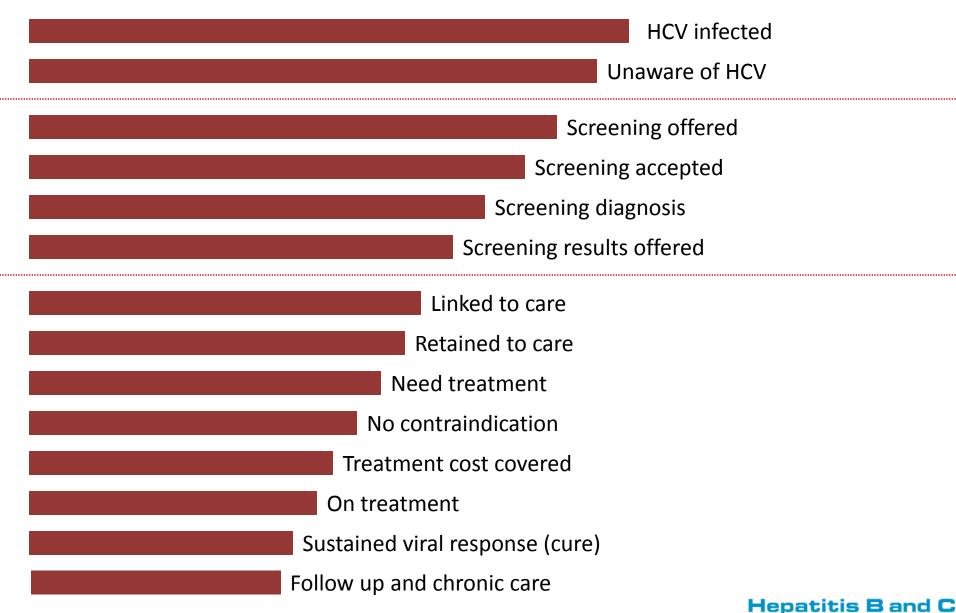
- ^a UNODC. World Drug Report 2017 (forthcoming, to be released on 22 June 2017). (For countries not reporting data on people who inject drugs [PWID], the regional prevalence was used to extrapolate the PWID population size.)
- This refers to the proportion of countries in the region with at least one operational needle and syringe programme (NSP) (Reference: The global state of harm reduction 2016. Harm Reduction International. (https://www.hri.global/contents/1739).
- c The data on needle—syringe distribution is poor and not recent this review is currently being updated and will be published towards the end of 2017.
- d Countries reporting NSP and reporting data on the number of needles-syringes distributed
- $^{\mathrm{e}}$ The median among those countries reporting NSPs and data on number of needles–syringes distributed
- f This total excludes countries and territories not classified as full WHO Member States.



Strategic Direction 3: Delivering for Equity. The "How"

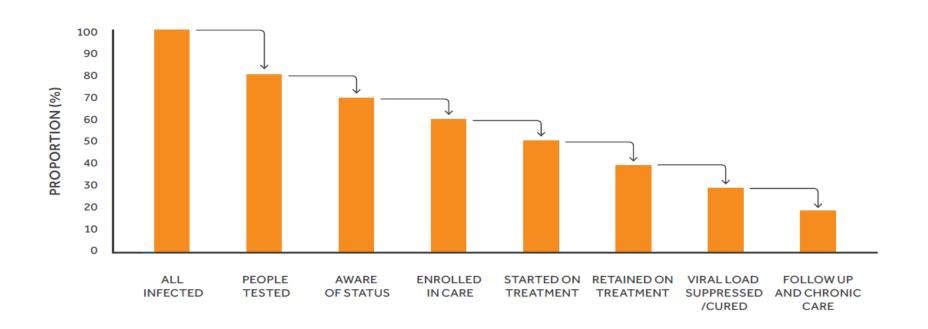
- 3.1 Public Health Approach
- 3.2 Optimization of Services Delivery
- 3.3 Continuum of Hepatitis Services
- 3.4 Respect of Principle of Equity and Human Rights
- 3.5 Sufficient Health Care Workforce

Treatment Cascade or Continuum of HCV Diagnosis, Care and Treatment



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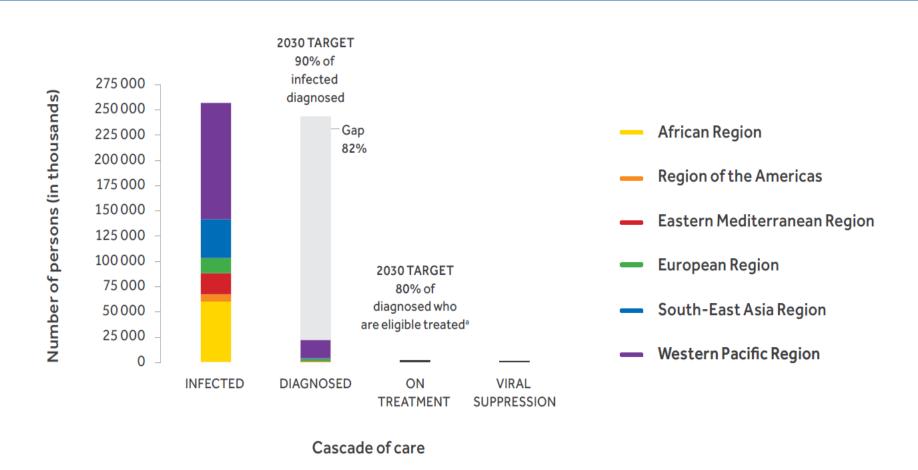
The continuum of viral hepatitis services and the retention cascade



CONTINUUM OF SERVICES - CASCADE OF CARE



Cascade of care for HBV infection, by WHO region, 2015: effective treatment is underused in most regions

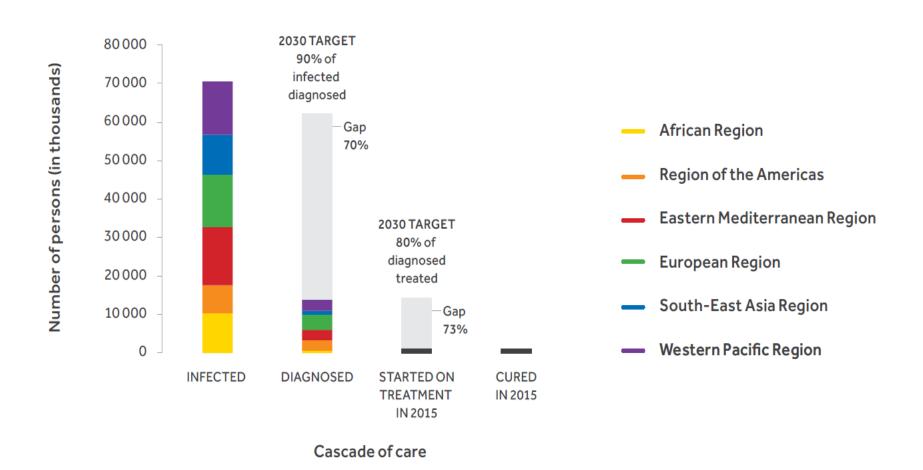


Source: WHO estimates, conducted by the Center for Disease Analysis. See Annex 2.

^a As the proportion of persons eligible for treatment among those diagnosed is unknown, the treatment gap cannot be calculated.

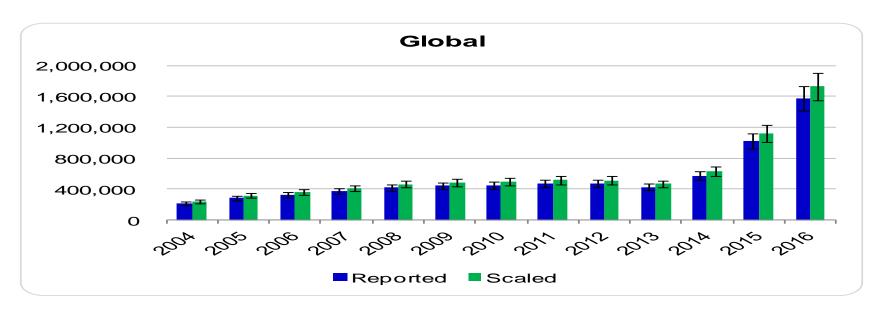


Cascade of care for HCV infection, by WHO region, 2015



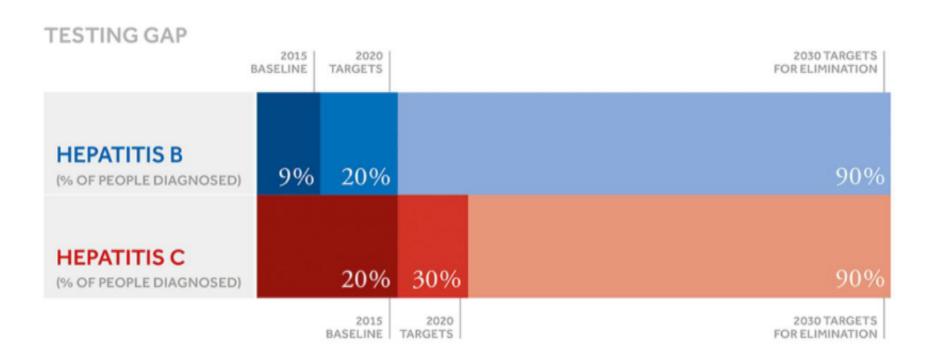
Source: WHO estimates, conducted by the Center for Disease Analysis. See Annex 2.

The latest HCV treatment data was released through social media and email



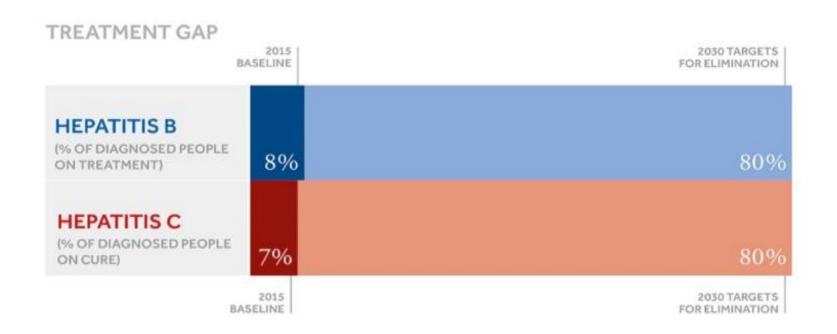
- Reached out to collaborators in >80 countries
- Treatment data for 2016 were available in 65 countries
 - The breakdown by DAA/non-DAA regimens was available for 60 countries
 - Treatment guidelines by fibrosis stage were available for 56 countries
- For 20 countries, without 2016 treatment estimates, the 2015 estimates were used.
- In 2016,1.6 million patients were treated across 85 countries
 - Approximately 80% of patients were treated with DAAs
 - Nearly 70% of patients were treated in a country with no fibrosis restrictions
- Adjusting for countries without data, there were an estimated 1.7 million patients treated in 2016

In 2017, the WHO endorsed CDA/Polaris HCV prevalence and cascade of care estimates -Major gaps in viral hepatitis-





In 2017, the WHO endorsed CDA/Polaris HCV prevalence and cascade of care estimates -Major gaps in viral hepatitis-

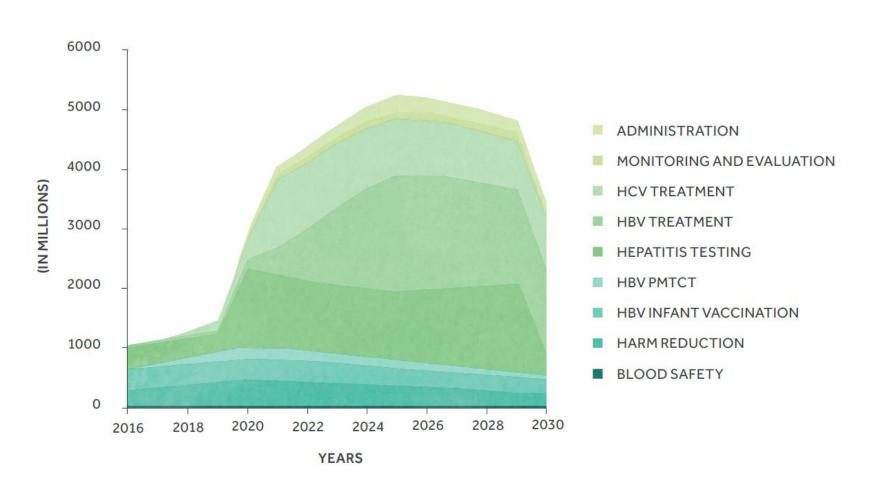




Strategic Direction 4: Financing and Sustainability. The "Financing"

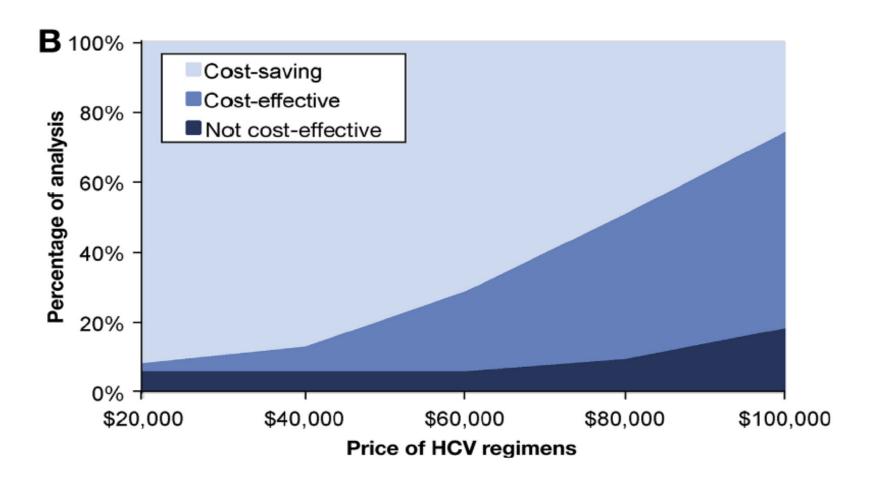
- 4.1 Hepatitis Services without Experiencing Financial Hardship
- 4.2 Sufficient Allocation of National Resources
- 3.3 Assessment of Services by Cost-Effectiveness and Budget Impact

Availability of Resources: The cost of implementing the global health sector strategy on viral hepatitis, 2016-2030 (US\$ million)

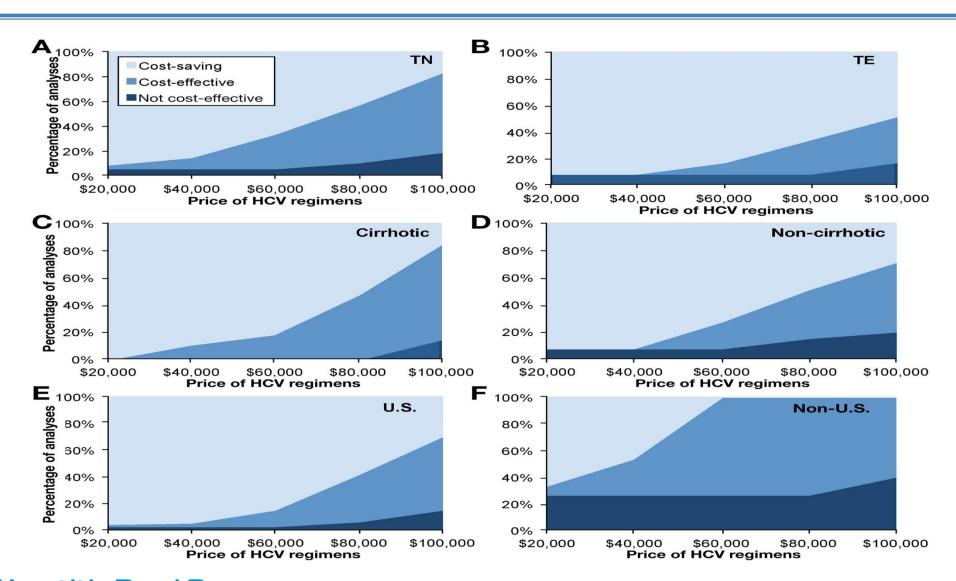




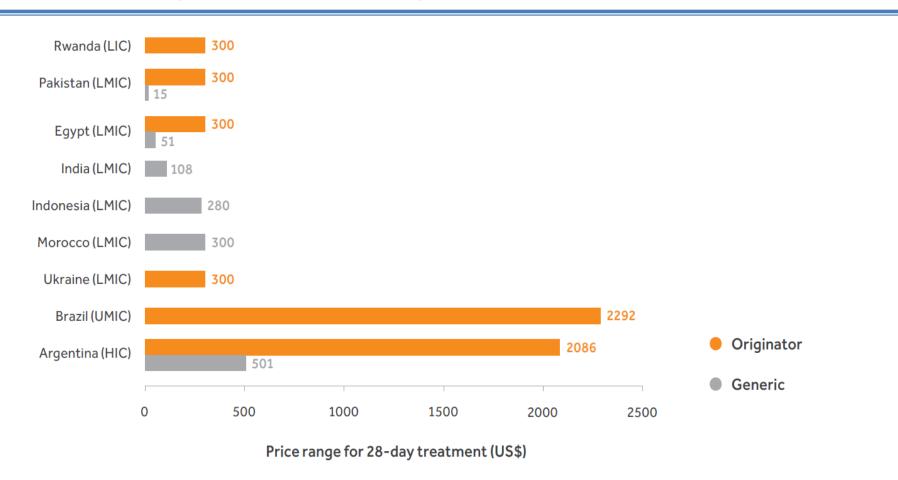
Availability of Resources for Testing- Care and Treatment (1)



Availability of Resources for Testing- Care and Treatment (2)

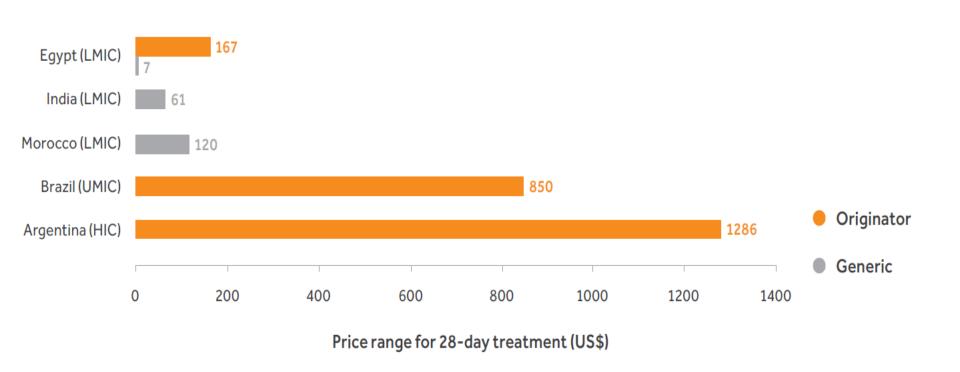


Reported prices (originators and generics) for a 28-day supply of sofosbuvir in selected countries, per country income group (price information updates as of November 2016)



HIC: high-income country; LIC: low-income country; LMIC: lower-middle-income country; UMIC: upper-middle-income country Source: Global report on access to hepatitis C treatment: focus on overcoming barriers. Geneva: World Health Organization; October 2016 (102)

Reported prices (originators and generics) for a 28-day supply of daclatasvir in selected countries, per country income group (price information updates as of November 2016)



HIC: high-income country; LIC: low-income country; LMIC: lower-middle-income country; UMIC: upper-middle-income country Source: Global report on access to hepatitis C treatment: focus on overcoming barriers. Geneva: World Health Organization; October 2016 (102)

Strategic Direction 5: Innovation for Acceleration . The "Future"

5.1 Research and Innovation Along the Entire Continuum of Prevention, Diagnosis, Treatment and Care Services

Ethical issues

- 1) Stigma
- 2) Inequalities
- 3) HCV/HBV screening should be connected with affordable care and treatment
- 4) Screening and treatment in balance with primary prevention

DIAGNOSTIC CHECKLIST OF HBV/HCV ELIMINATION

"Diagnostic" Checklist for HCV/HBV Elimination

- 1) Status of primary prevention
- 2) Viremic prevalence
- 3) Age and sex distribution of HCV/HBV
- 4) Diagnostic rate
- 5) Distribution of CHC/CHB by fibrosis stage
- 6) Efficient testing strategy
- 7) Treatment rate
- 8) Increase in the future treatment coverage
- 9) Availability of resources for testing, care and treatment
- 10) Ethical issues



Status of Primary Prevention

- It is reflected in the assumed number of new HCV/HBV infections per year in the past and up to 2030.
- Assumed number of new infections in the past can be reliably estimated for some groups where yearly seroprevalence data are available (e.g. PWIDs).
- Past infections are estimated by various methods (backcalculation, population surveys, modelling etc).
- HBV vaccination coverage by time.

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HCV ELIMINATION IN EU-28



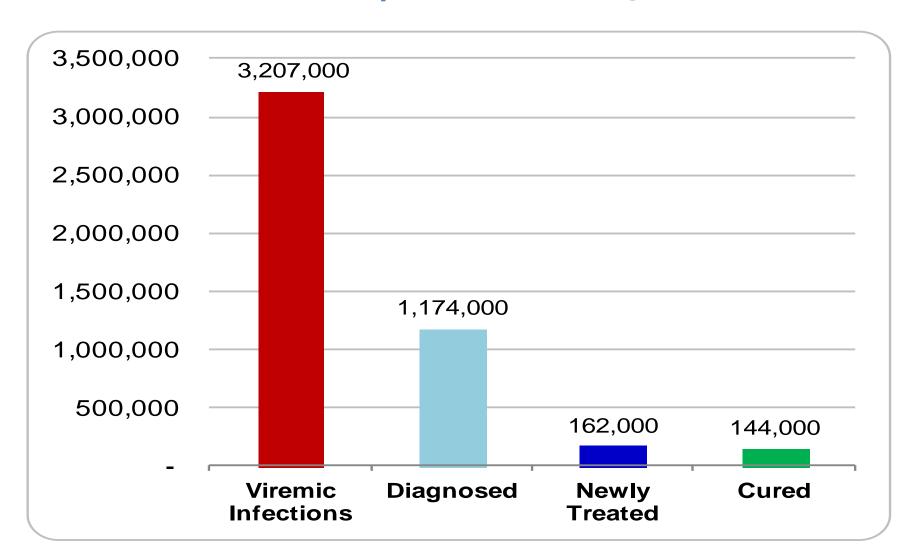
1st EU HCV Policy Summit "Hepatitis C:The Beginning of the End: Key Elements for Successful European and National Strategies to Eliminate HCV in Europe".

Brussels, February 17, 2016

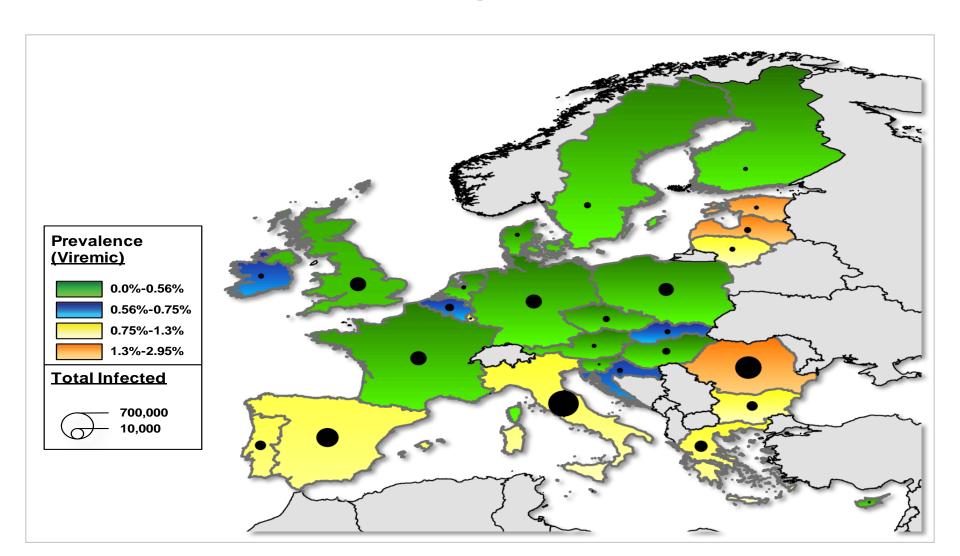
The Burden of HCV and Treatment Cascade in the European Union: Is Elimination Possible?

H. Razavi et al, 2016

Parameters of Treatment Cascade in European Union 2015

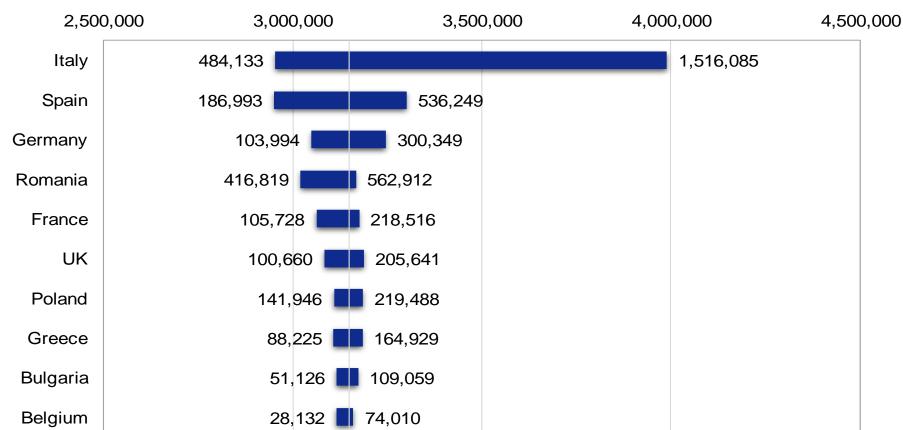


HCV prevalence and total infected in the European Union



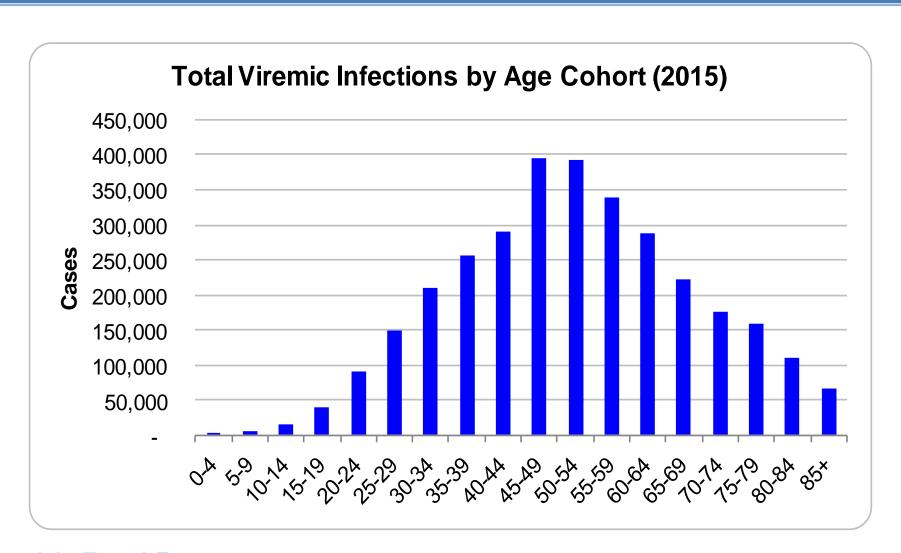
Sensitivity analyses – Country viremic infection uncertainty (top 10 shown)



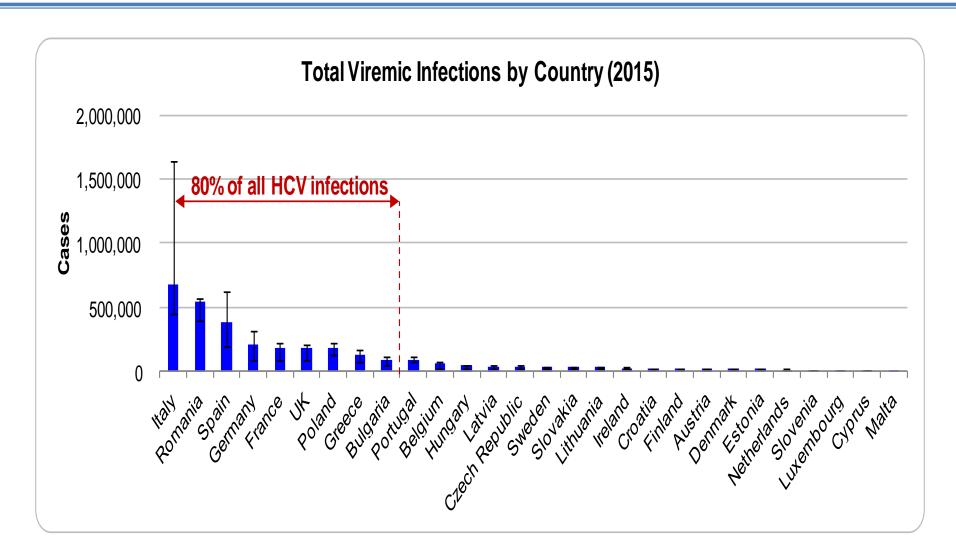


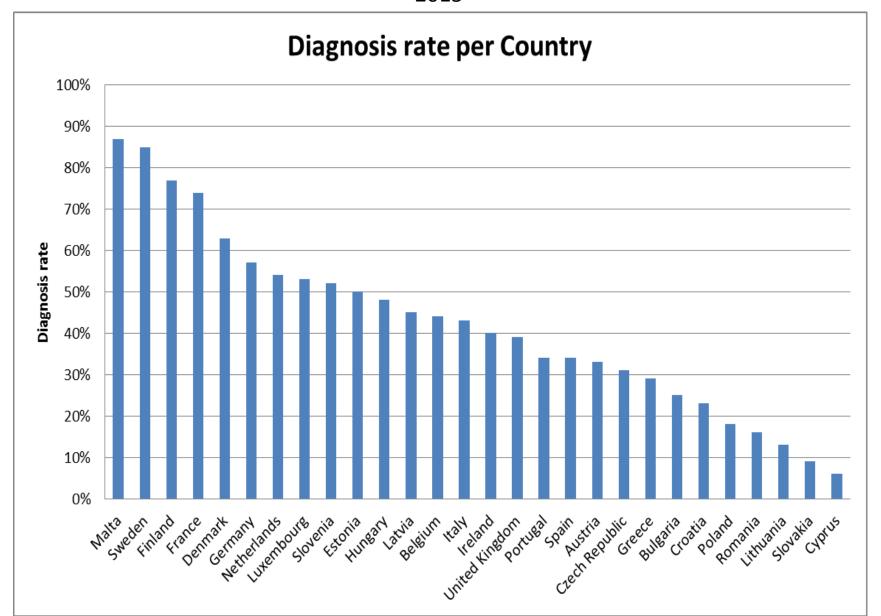


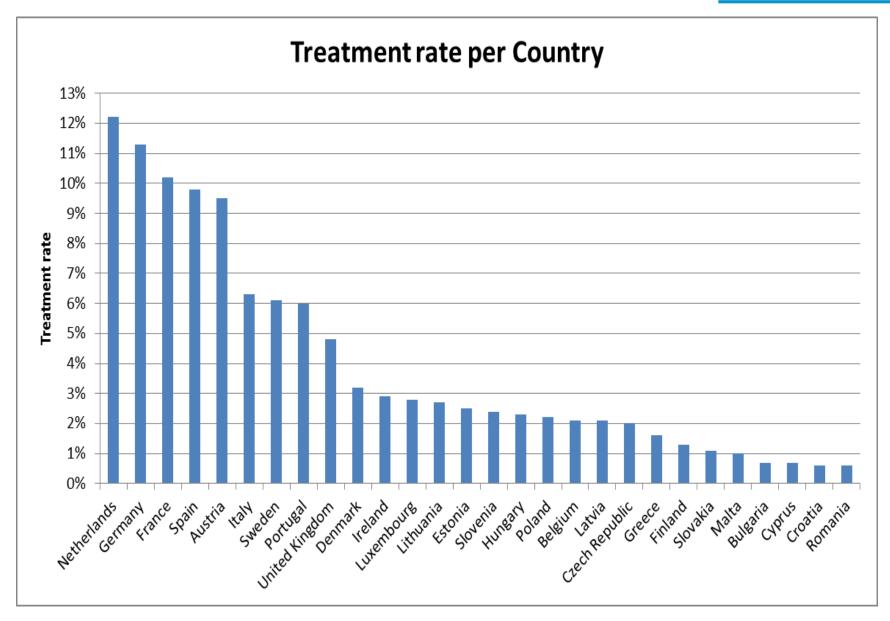
European Union viremic infections by age cohort, 2015



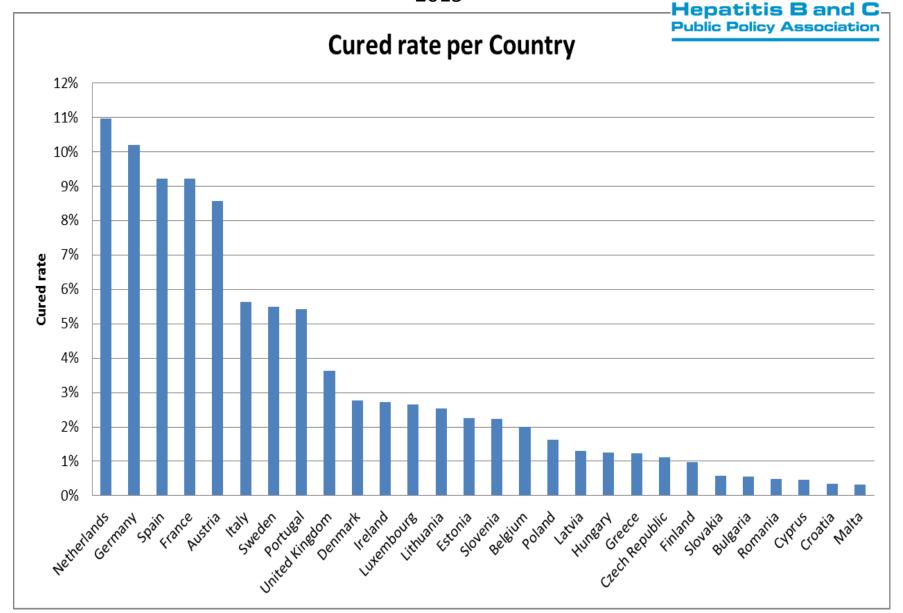
Total viremic HCV infections, by country, 2015





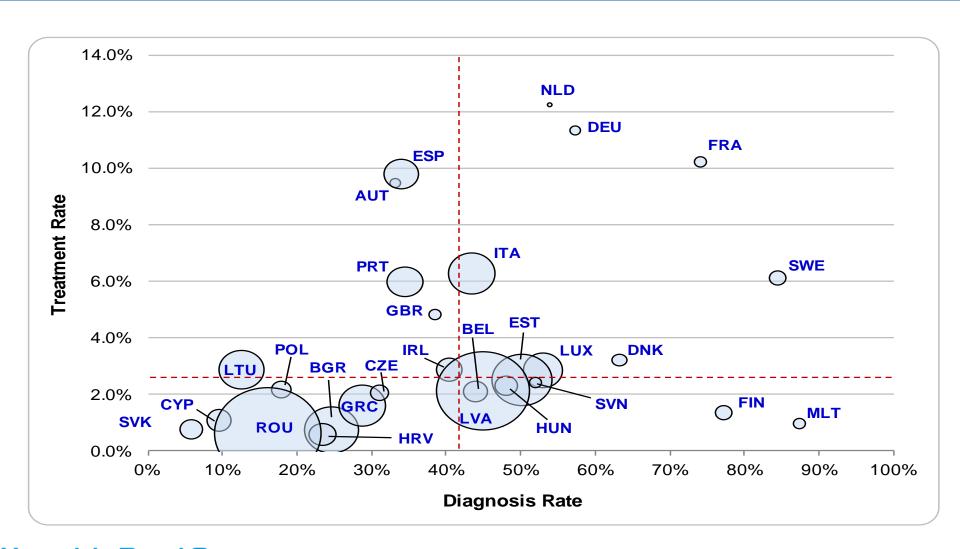


Treatment rate = number of treated 2015/ number of viremic infections 2015

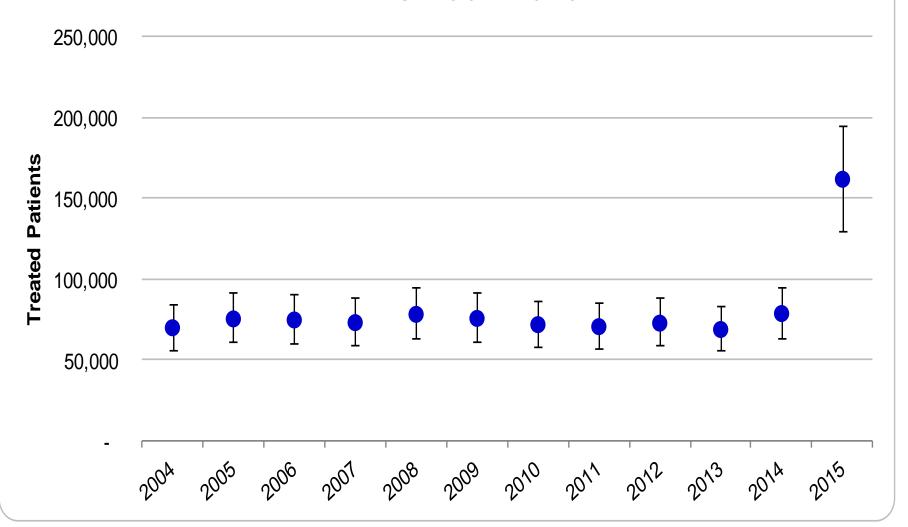


Cured rate = number of cured 2015/ number of viremic infections 2015

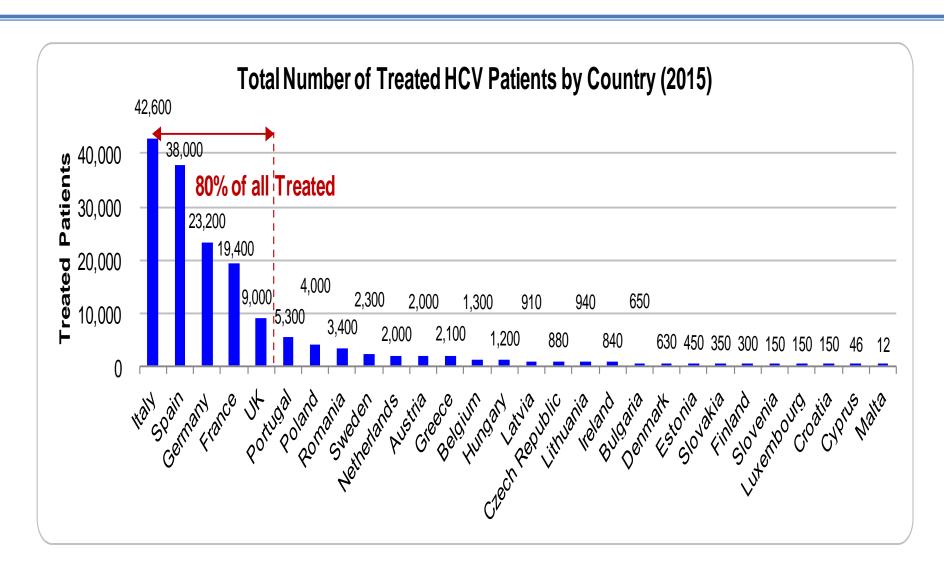
HCV Prevalence, Diagnosis and Treatment Rates, 2015



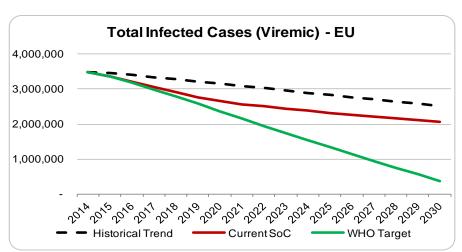
Annual Number of Treated HCV Patients in the EU 2004-2015

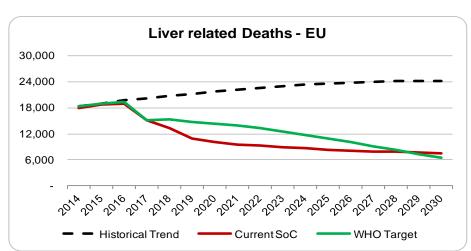


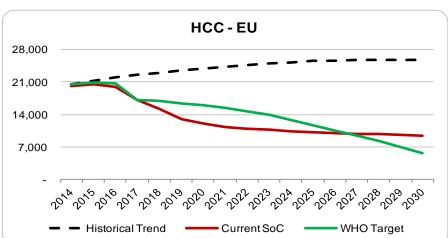
Number of treated patients, by country, 2015

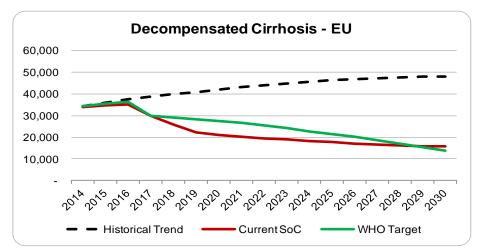


Projection of HCV Morbidity and Mortality, by Diagnosis and Treatment Strategy, 2014-2030









Projection of HCV Morbidity and Mortality, by Diagnosis and Treatment Strategy, 2014-2030

Historical Trend ----

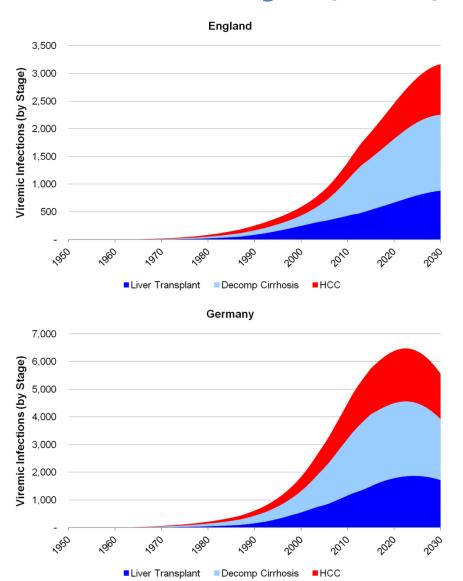
Genotype-Weighted HCV (Fibrosis ≥ F1).Treatment with PEG/RIBA. Annual treatment of 79.000 patients

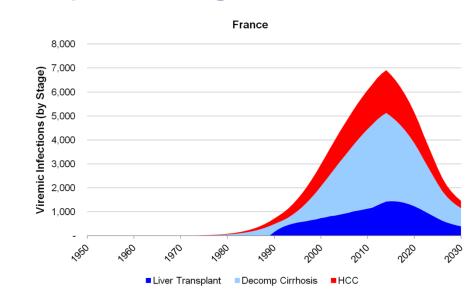
Current Standard of Care ____
Use of DAAs (Fibrosis ≥ F2). Annual treatment of 162.000 patients

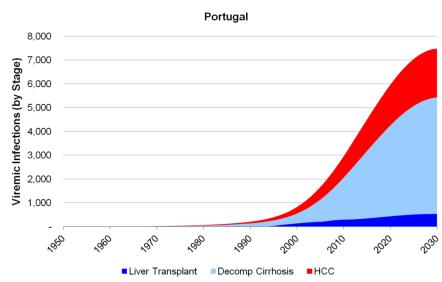
WHO Target ____

65% reduction in liver related deaths and 90% reduction on new infections by 2030. Annual treatment of 174.000 patients plus improvements in harm-reduction and screening strategies

HCC, Decompensated Cirrhosis and Transplant, 1950-2030 England, France, Germany and Portugal

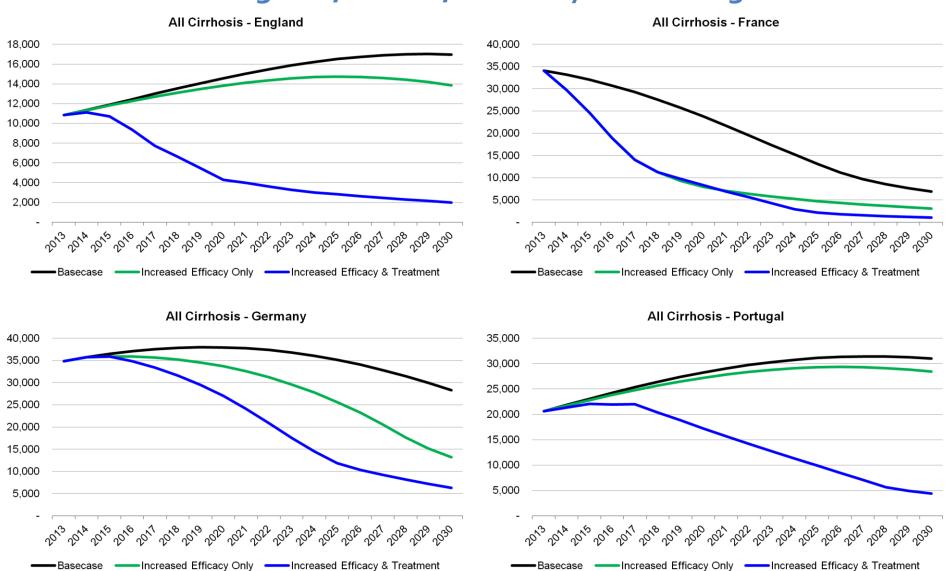








Cirrhosis, 2013-2030 England, France, Germany and Portugal



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HCV ELIMINATION MANIFESTO "HEPATITIS C- FREE EUROPE"



Hepatitis C Elimination in Europe "Our vision for a Hepatitis C-free Europe"

We, the signatories of this declaration, gathered in Brussels on the occasion of the first European Union HCV Policy Summit, on 17 February 2016, are committed to the elimination of hepatitis C in Europe.

- Hepatitis C is a life-threatening disease; it affects millions of people across Europe and has a significant morbidity and premature death burden¹;
- Today, scientific breakthroughs give us the unique opportunity to eliminate hepatitis
 C in Europe, averting a significant toll in terms of deaths and societal and economic costs;
- The specific challenges of hepatitis C require holistic, people-centred, health systemwide approaches to disease awareness, prevention and integrated care, with all stakeholders combining their diverse skills and resources in a unified response.

We share the vision that eliminating hepatitis C in Europe by 2030² will require us to:

- 1) Make hepatitis C and its elimination in Europe an explicit and adequately resourced public health priority, to be pursued using appropriate means at all levels through collaboration between individual citizens, civil society organisations, researchers, the private sector, local and national governments, European Union institutions including the Commission, ECDC, EMCDDA, the WHO Regional Office for Europe and other relevant regional bodies;
- 2) Ensure that patients, civil society groups and other relevant stakeholders are directly involved in developing and implementing hepatitis C elimination strategies, with existing best practice examples and guidelines serving as the basis for people-centred health systembased strategies that emphasise tailored implementation at the local level;
- 3) Make the development of integrated care pathways a core component of hepatitis C elimination strategies, taking into account the specific health system barriers and other challenges related to the management of hepatitis C infection;

- 4) Pay particular attention to the links between hepatitis C and social marginalisation, and for all hepatitis C elimination-related activities to be consistent with fundamental human rights principles including non-discrimination, equality, participation and the right to health;
- 5) Strengthen efforts to harmonise and improve the surveillance of hepatitis C across the European Union, to inform and evaluate hepatitis C elimination strategies;
- 6) Introduce a European Hepatitis Awareness Week (the week of World Hepatitis Day) to hold intensive, coordinated awareness-raising and educational activities across Europe;
- 7) Review progress on achieving the objectives and goals set out in this manifesto on a regular basis and promote the manifesto at all relevant opportunities.





TO NOTE

In developing this Manifesto, the following documents were taken into consideration:

- World Hepatitis Summit, 2-4 September 2015, Glasgow link
- Glasgow Declaration on Viral Hepatitis, September 2015 link
- World Health Assembly, Resolution 67.6 on Hepatitis, 24 May 2014 link
- WHO, Prevention and Control of Viral Hepatitis Infection: Framework for Global Action, 2012 link
- World Health Assembly, Resolution 63.18 on Viral Hepatitis, 21 May 2010 link
- Hepatitis B and C Public Policy Association, High Level Meeting "Economic crisis and healthcare –
 ensuring access to public health services: the case of hepatitis B and C", 3-4 June 2014 link
- Hepatitis B and C Public Policy Association, Summit Conference on Hepatitis B and C in Mediterranean and Balkan Countries, 5-7 September 2012 – <u>link</u>
- Hepatitis B and C Public Policy Association, Summit Conference on Viral Hepatitis, 14-15 October 2010, Brussels – <u>link</u>

REFERENCES

- ¹ The WHO estimates that there are 14 million people affected by hepatitis C across WHO European Region and various accounts report some 6 million living in the European Union alone
- 2 In line with the goals of the draft WHO Global Health Sector Strategy 2016-2021, November 2015 $\overline{
 m link}$









Acknowledgements

 Homie Razavi, Center for Disease Analysis, USA