

Viral Hepatitis: Moving from control to elimination



HIV/AIDS Department and Global Hepatitis Programme

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Outline

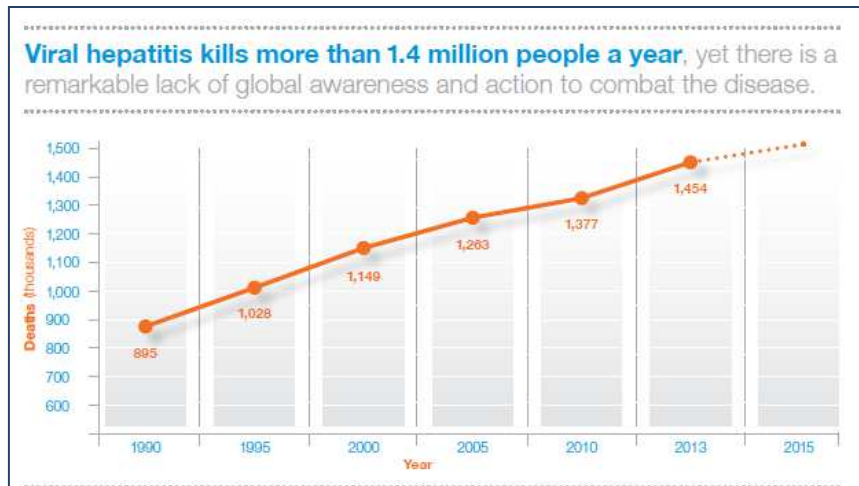
- Update on epidemiology of viral hepatitis
- Hepatitis prevention interventions
- WHO global hepatitis strategy targets

Characteristics of main types of viral hepatitis infections

	Hep A	Hep E		Hep B ± D	Hep C
Mode of transmission	Contaminated food, water			Blood, sex, mother-to-child	
Primary disease outcomes	Fulminant hepatitis	Fulminant hepatitis; maternal mortality		Cirrhosis; hepatocellular carcinoma	
Number chronic infections	0	Very few		~240 million	~130-150 million

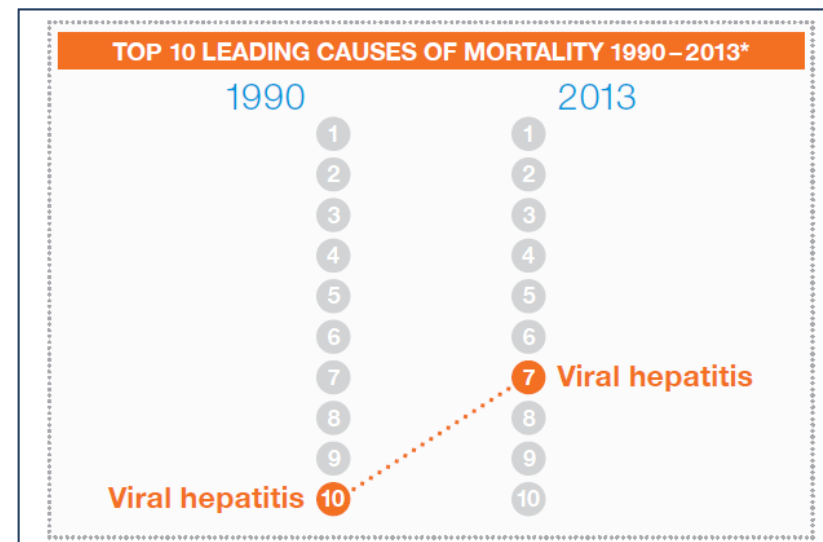
**Source: Global Burden of Disease Study 2010 Lozano et al, Lancet 2012*

Epidemiologic imperative: high and increasing burden of disease

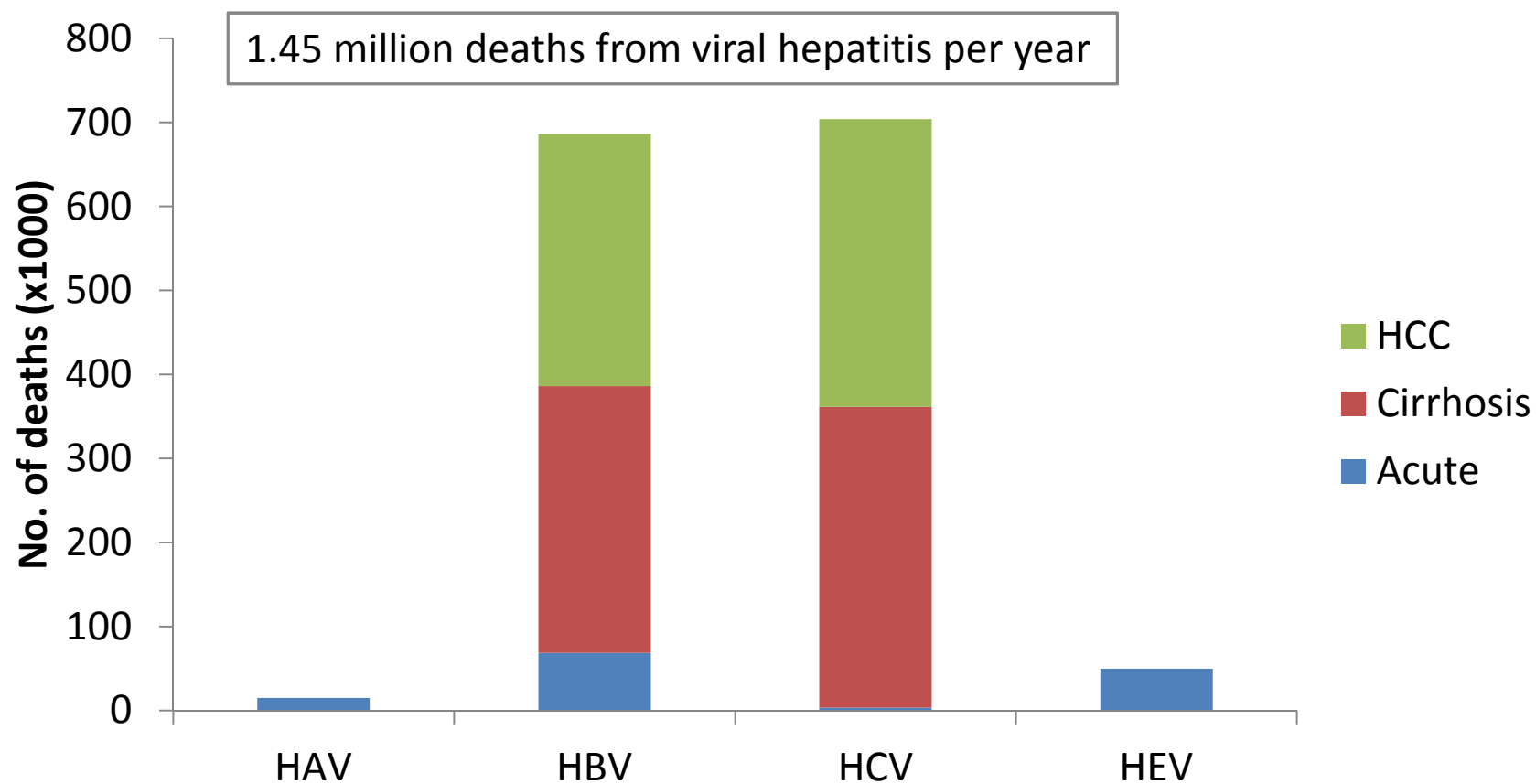


400 million persons with chronic HBV or HCV infection

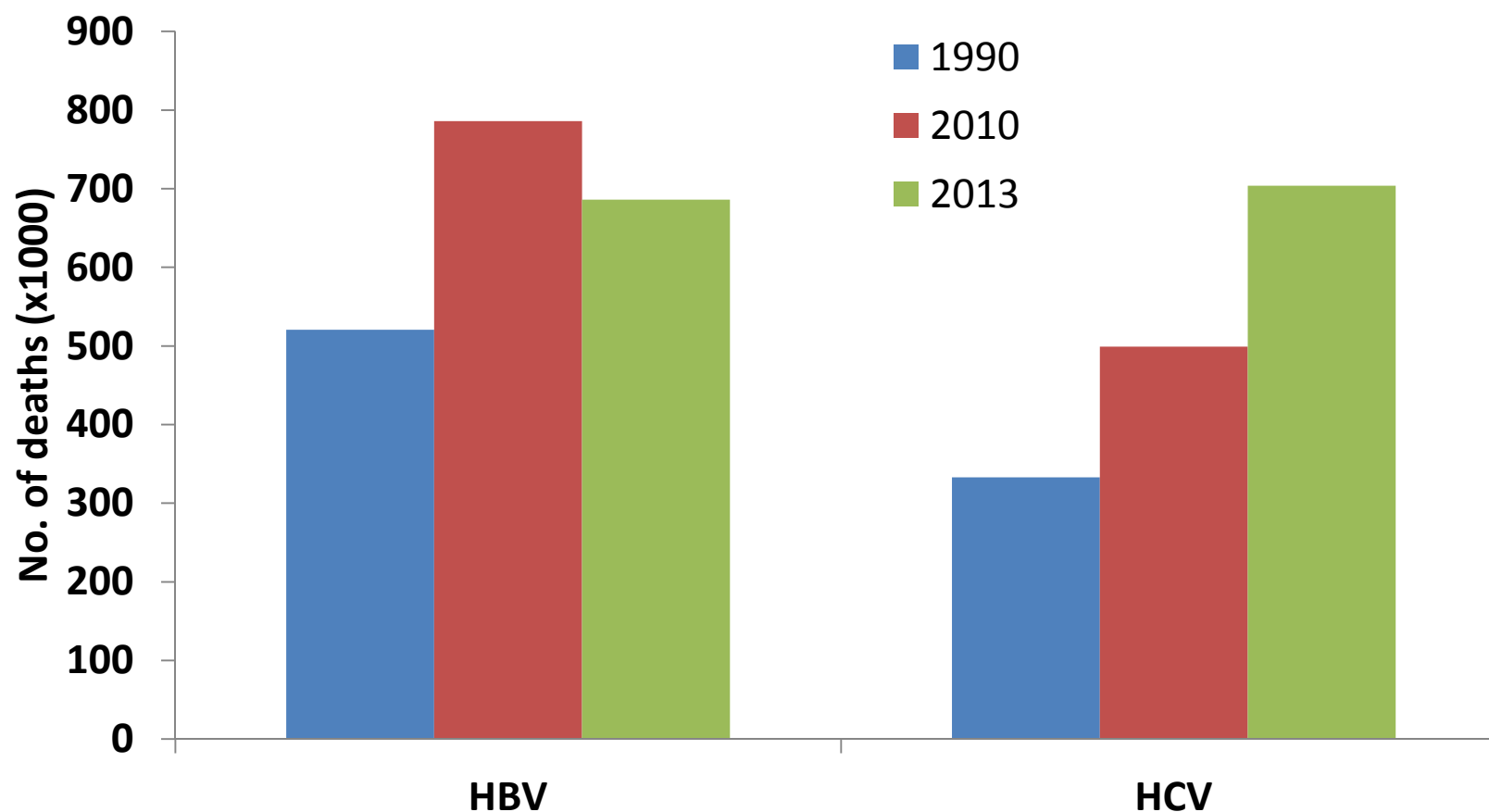
Highest prevalence in Asia and Africa



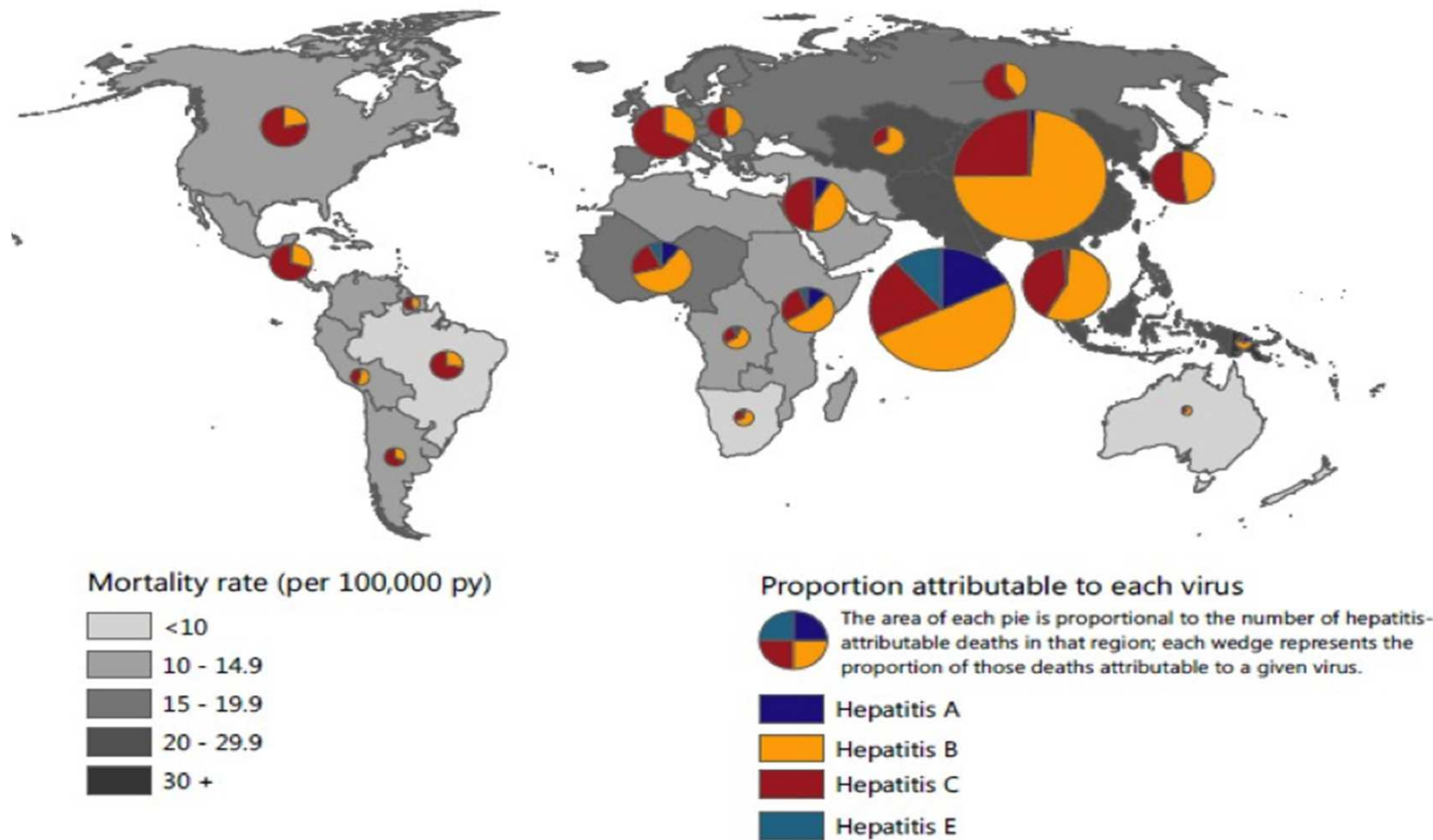
Hepatitis-related mortality, 2013



Number of deaths/year from hepatitis B and C, Global Burden of Disease Study 1990, 2010 and 2013



Hepatitis mortality rates and virus distribution, by Global Burden of Disease region

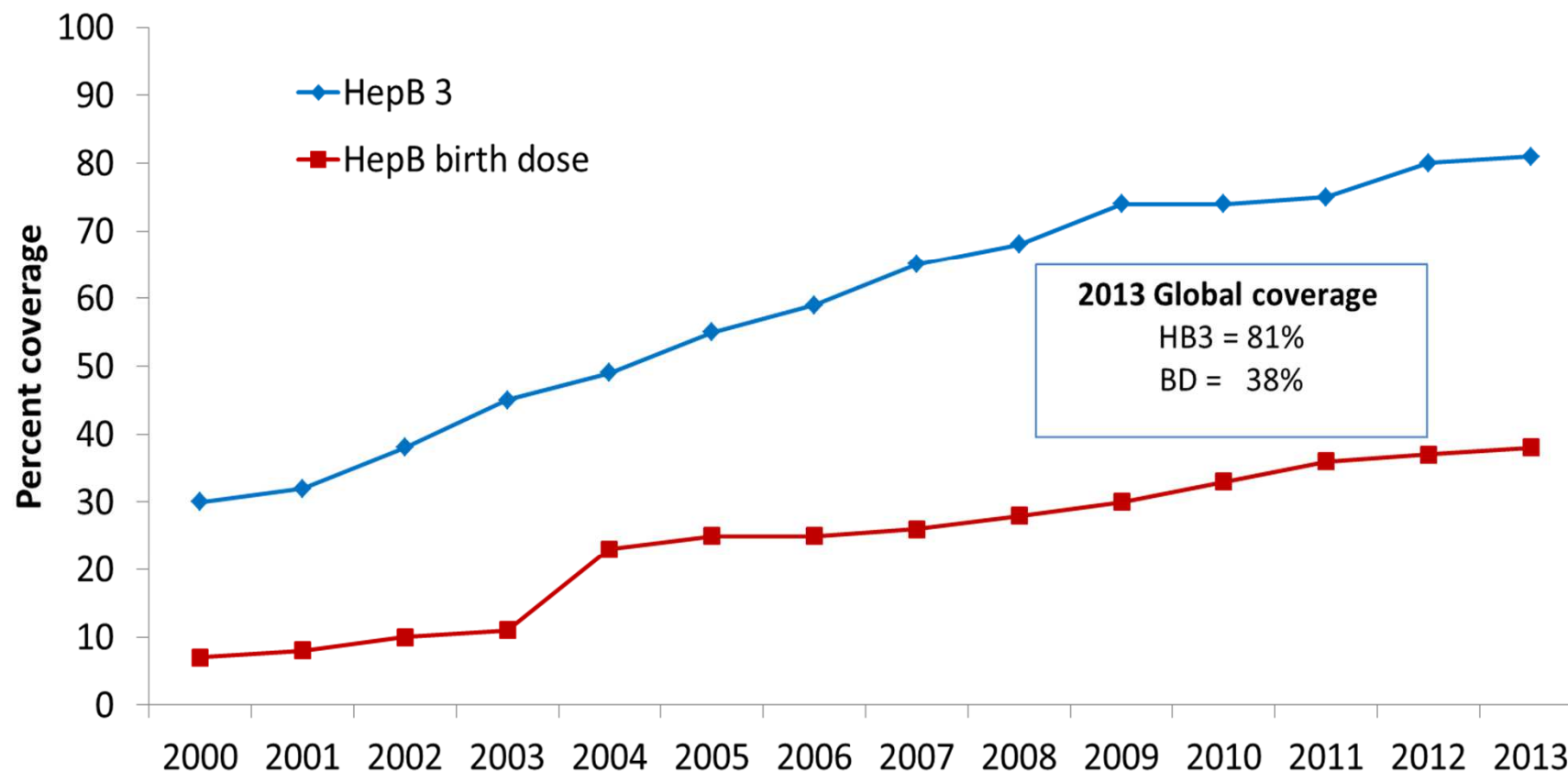


Courtesy of Graham Cooke based on Global Burden of Disease 2010

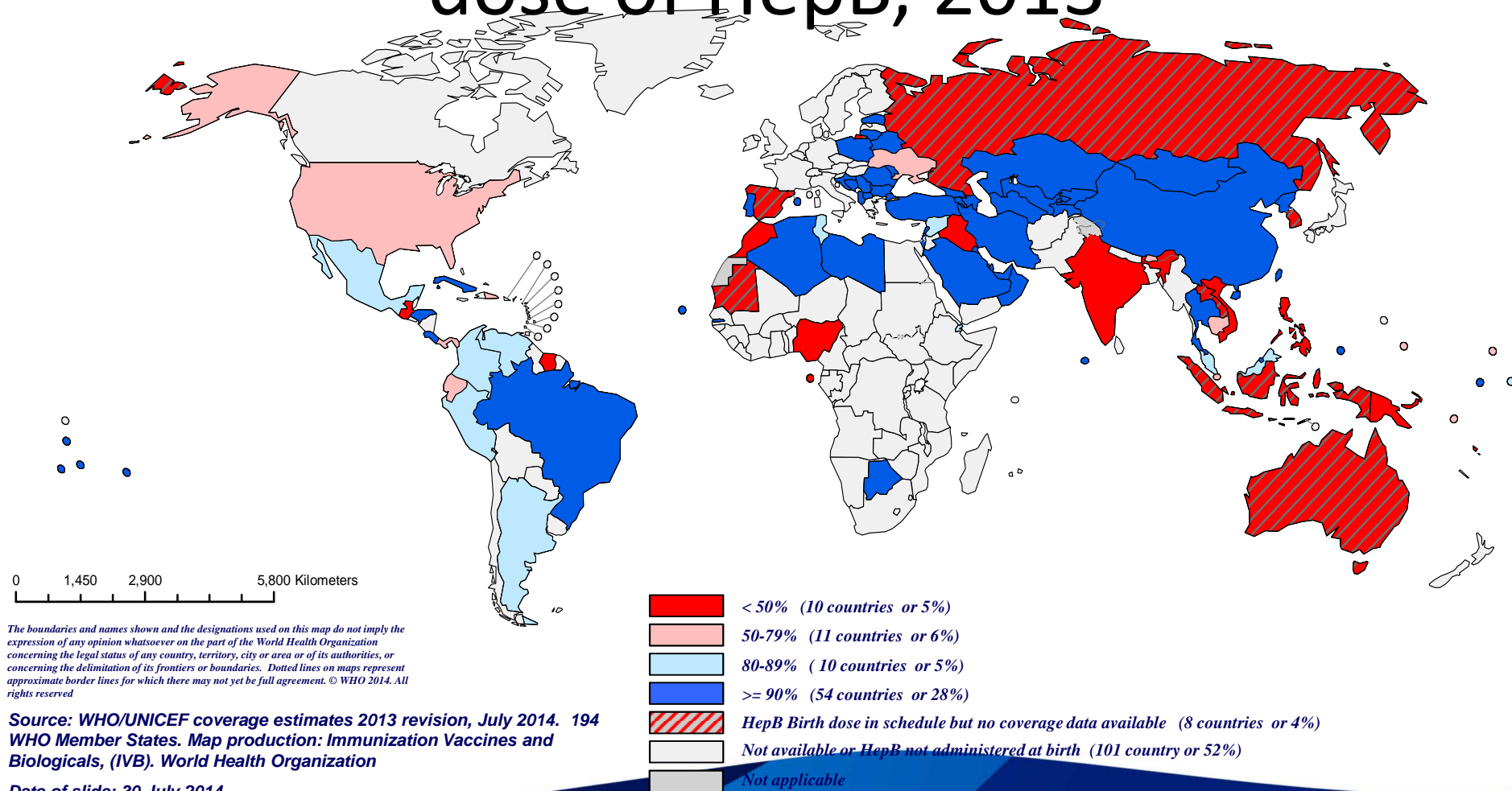
What can be done? HBV and HCV

Intervention	HBV	HCV	Status
Vaccine	✓		HBV vaccine coverage: <ul style="list-style-type: none"> • 81% for childhood immunization • 38% for birth dose
Safe blood	✓	✓	39 countries without universal testing of blood donations
Infection control practices	✓	✓	Significant risk in some countries due to overuse of injections and reuse of syringes
Harm reduction for people who inject drugs	✓	✓	Insufficient coverage of services
Safer sex practices	✓	✓	Vaccination (HBV), condom promotion, partner reduction
Prenatal interventions	✓		Inadequate coverage or HBV birth dose, role of HBIG, antivirals?
Treatment	✓	✓	Very low coverage

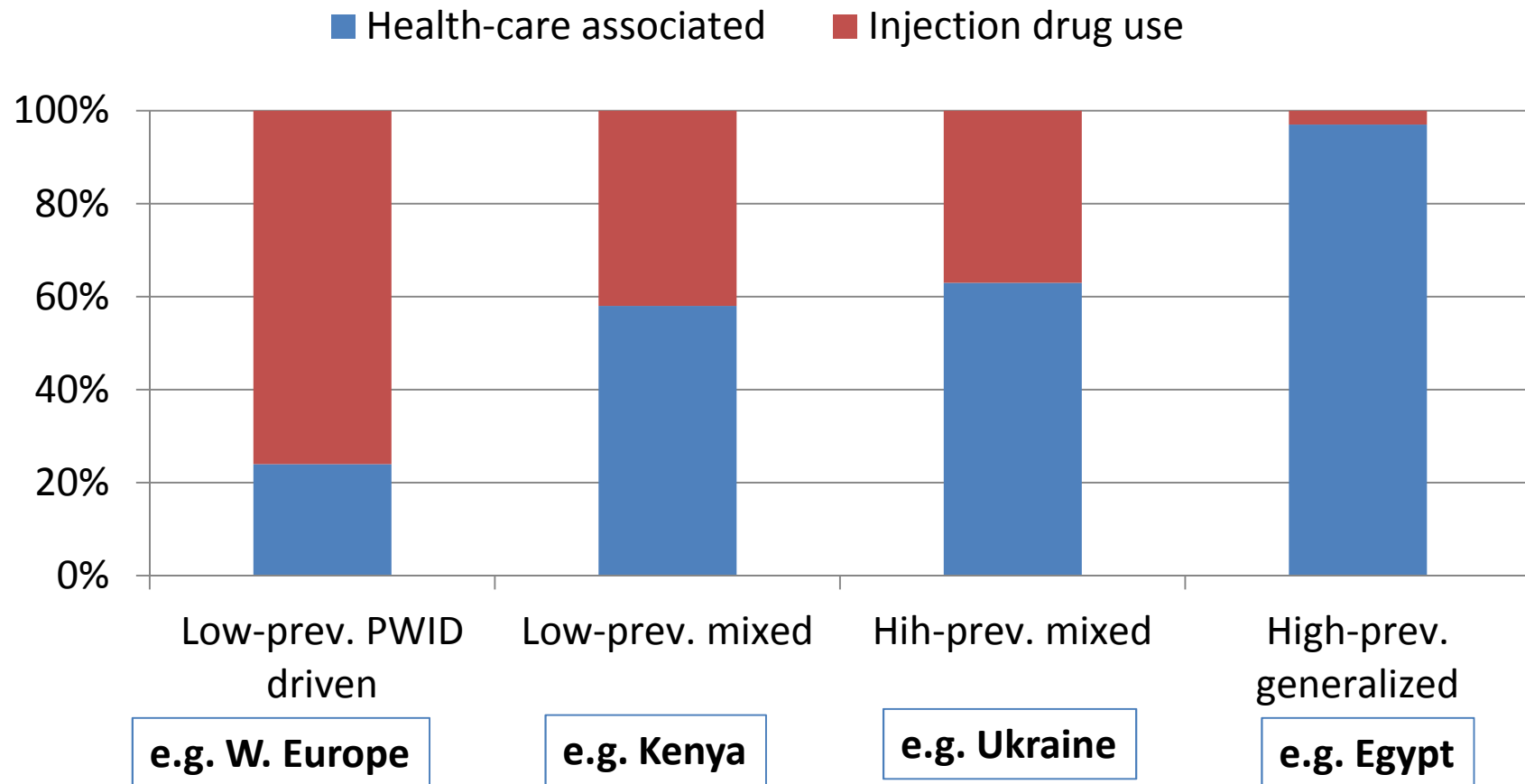
Continued success in HBV immunization: Global HepB3 & Birth Dose coverage, 2000-2013



Immunization coverage with Birth dose of HepB, 2013

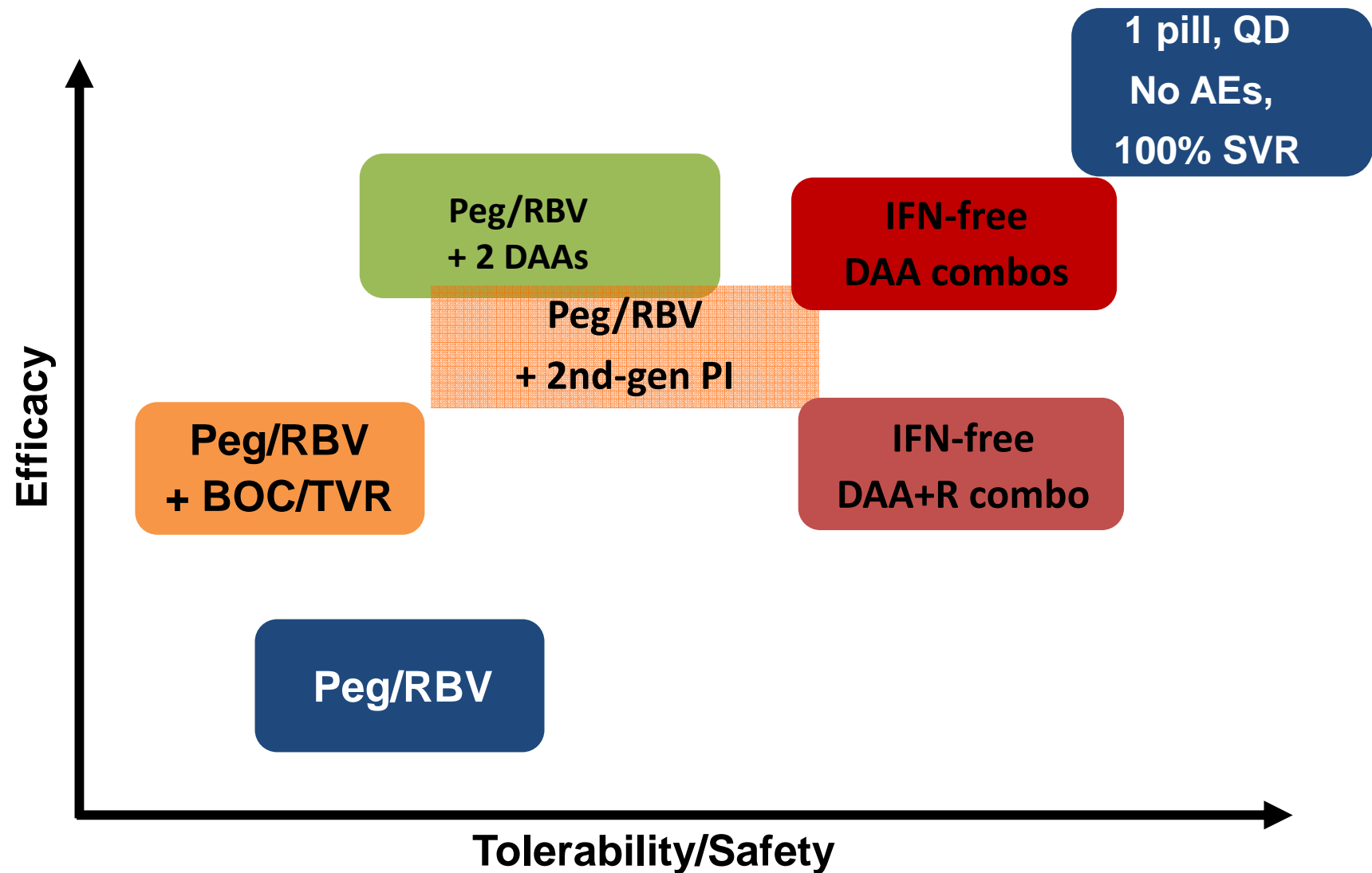


Estimated proportion of new HCV infection by route of transmission



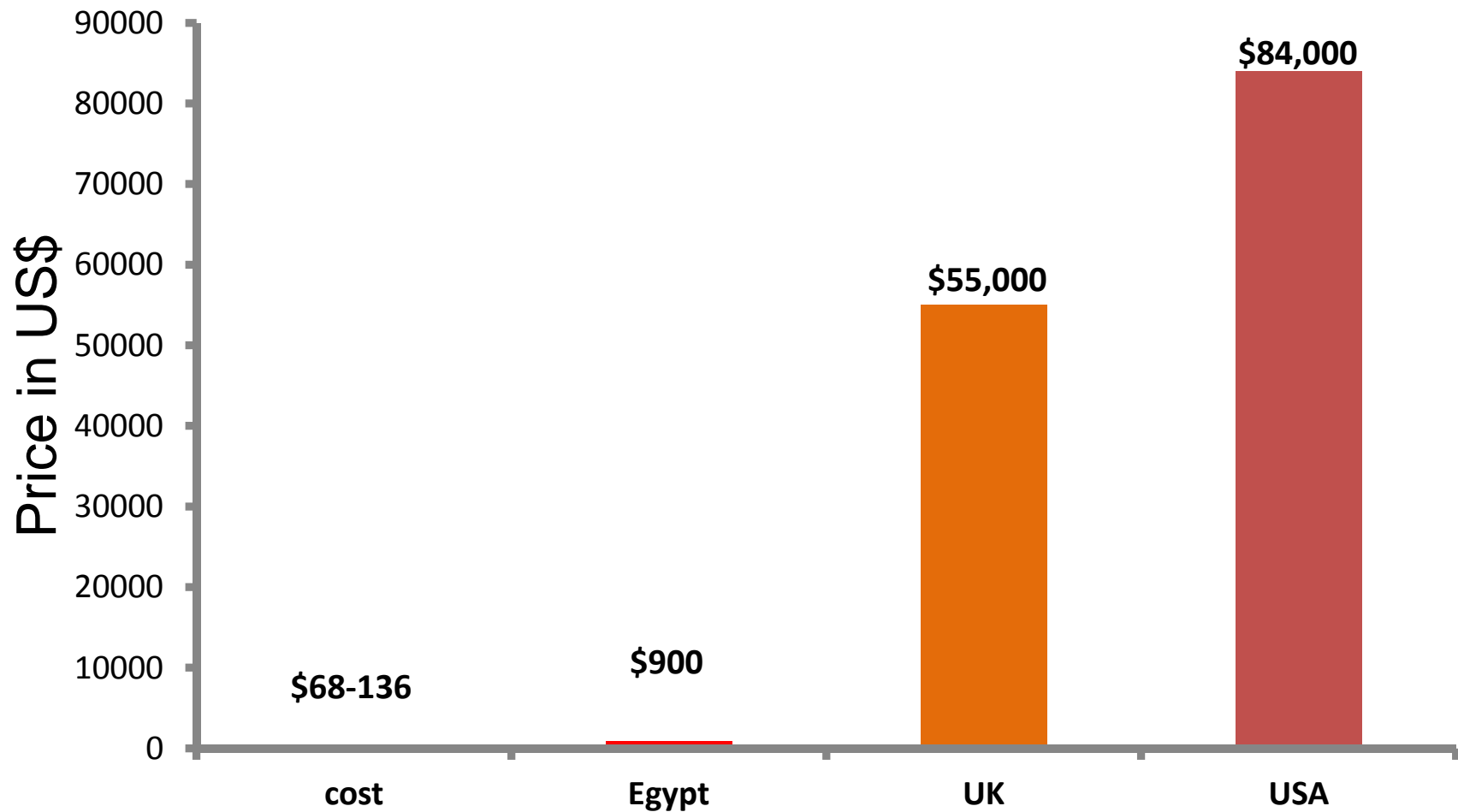
Vickerman P, unpublished data

Improvements in safety and efficacy of HCV therapy



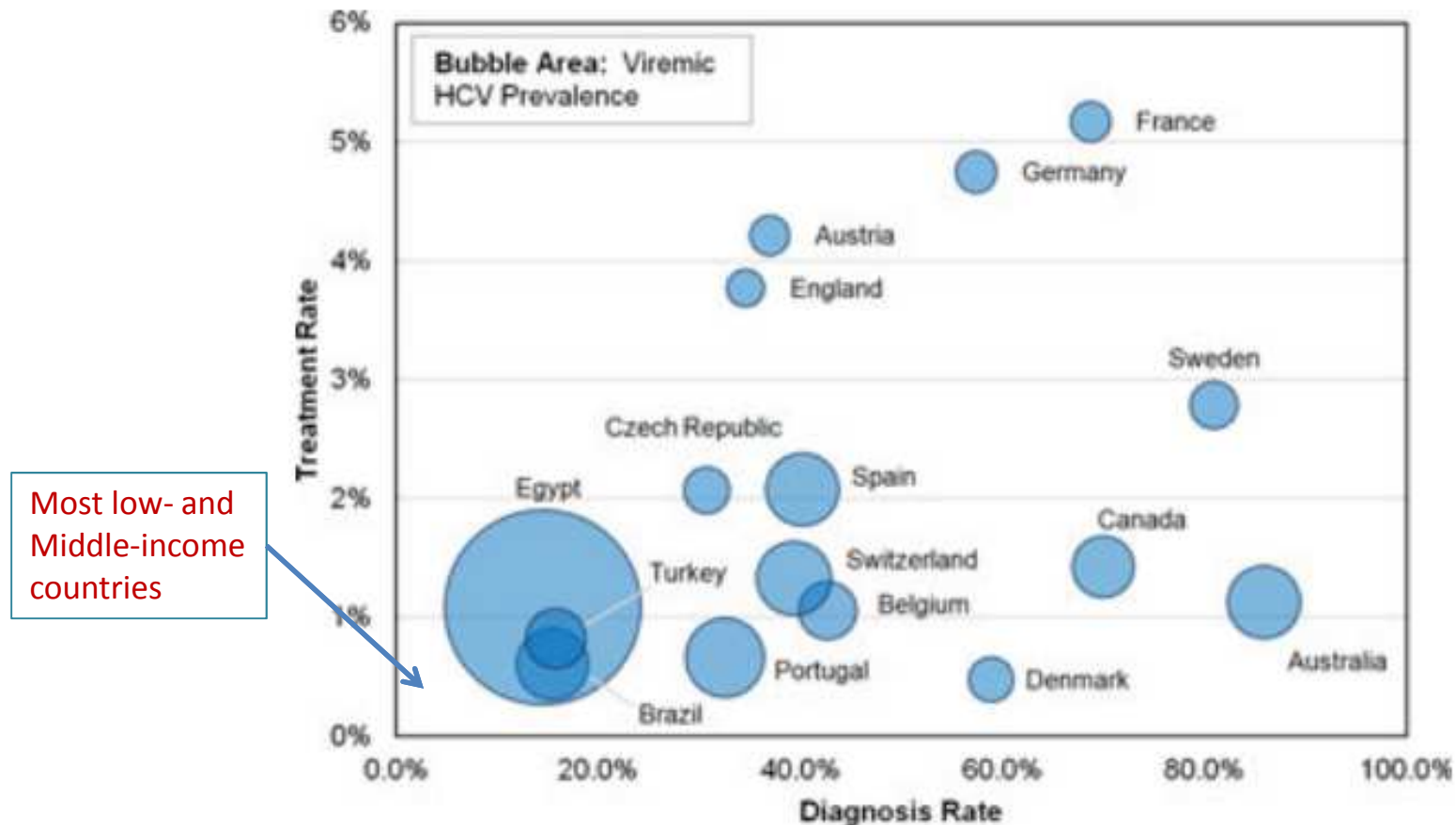
Prices of sofosbuvir

list price for 12 weeks of treatment, per patient US\$



Hill et al, Clin Infect Dis. Feb 2014
Reuters news website April 2014

Estimated chronic HCV prevalence, diagnosis and treatment rates in 2013



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World Health Assembly 2014 Hepatitis Resolution

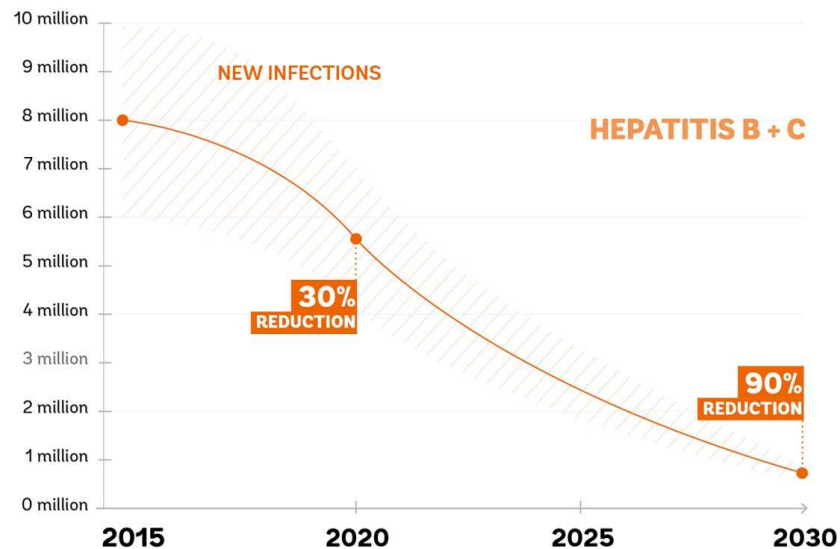
Asks WHO to “Examine the feasibility of elimination of hepatitis B and hepatitis C with a view to potentially setting global targets”

Global hepatitis strategy

- **Vision** *“A world where viral hepatitis transmission is stopped and everyone has access to safe, affordable and effective treatment and care”*
- **Elimination as a public health issue of concern** - remove sustained transmission, remove hepatitis as a leading cause of mortality:
 - Elimination and not eradication: **long wave of prevalence** will remain for decades
- **Technically feasible** by scaling up **six key interventions** to high coverage

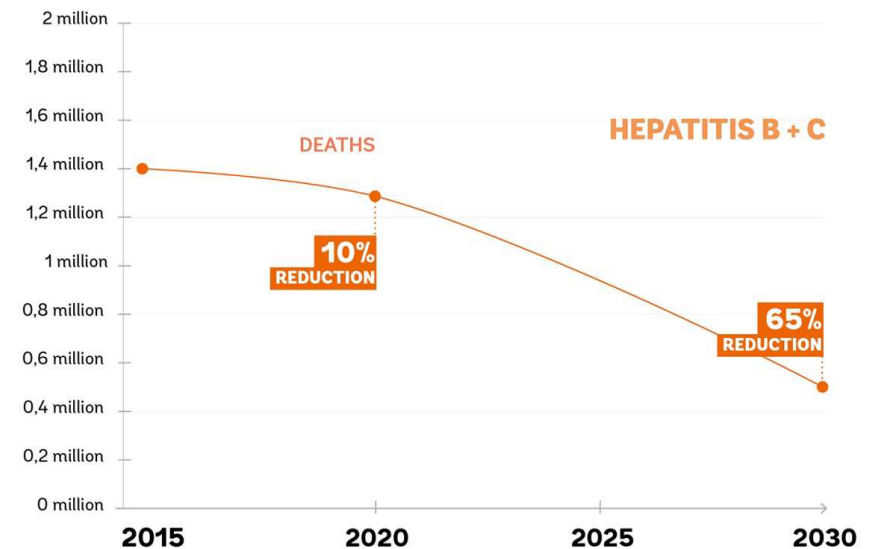
Impact targets for elimination

**90% reduction in new cases of
of chronic HBV and HCV infection**



**6-10 million infections (in 2015) to
900,000 infections (by 2030)**

**65% reduction in deaths from
chronic HBV and HCV**



**1.4 million deaths (in 2015) to under
500,000 deaths (by 2030)**

Global Hepatitis Health Sector Strategy 2016-2021: Proposed service-coverage targets

Intervention	Indicator	Baseline	2020	2030
HBV vaccination	Childhood vaccine coverage	81%	90%	>90%
	Birth dose vaccine coverage	38%	80%	90%
Safe injection	Percent of injections administered with safety-engineered devices	5%	50%	90%
Harm reduction	Number of syringes/needles distributed/PWID/year	20	200	400
HBV and HCV Treatment	Percent of treatment-eligible persons with chronic who are treated	<1%	5m HBV 3m HCV	80%

What will it take to achieve the targets?

- Advocacy, Commitment and Resources
- A public health approach (simplification, integration, affordability, equitable access)
- Partnerships (governments, civil society, private sector, ...)
- Concrete and tailored action in countries (guided by national plans)

Thank you