

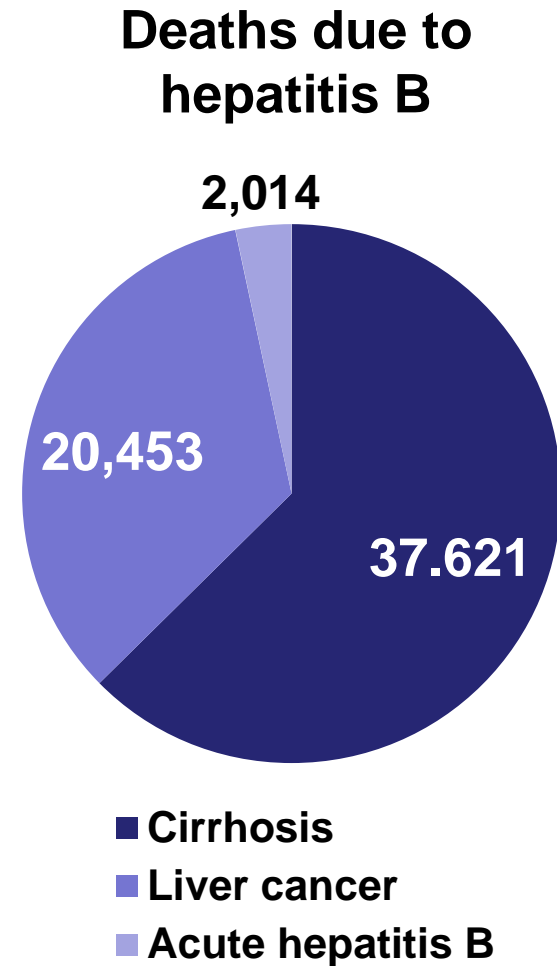
Hepatitis B immunization in WHO European Region

Viral Hepatitis Prevention Board

Dr Liudmila Mosina
WHO Regional Office for Europe

Hepatitis B burden in WHO European Region

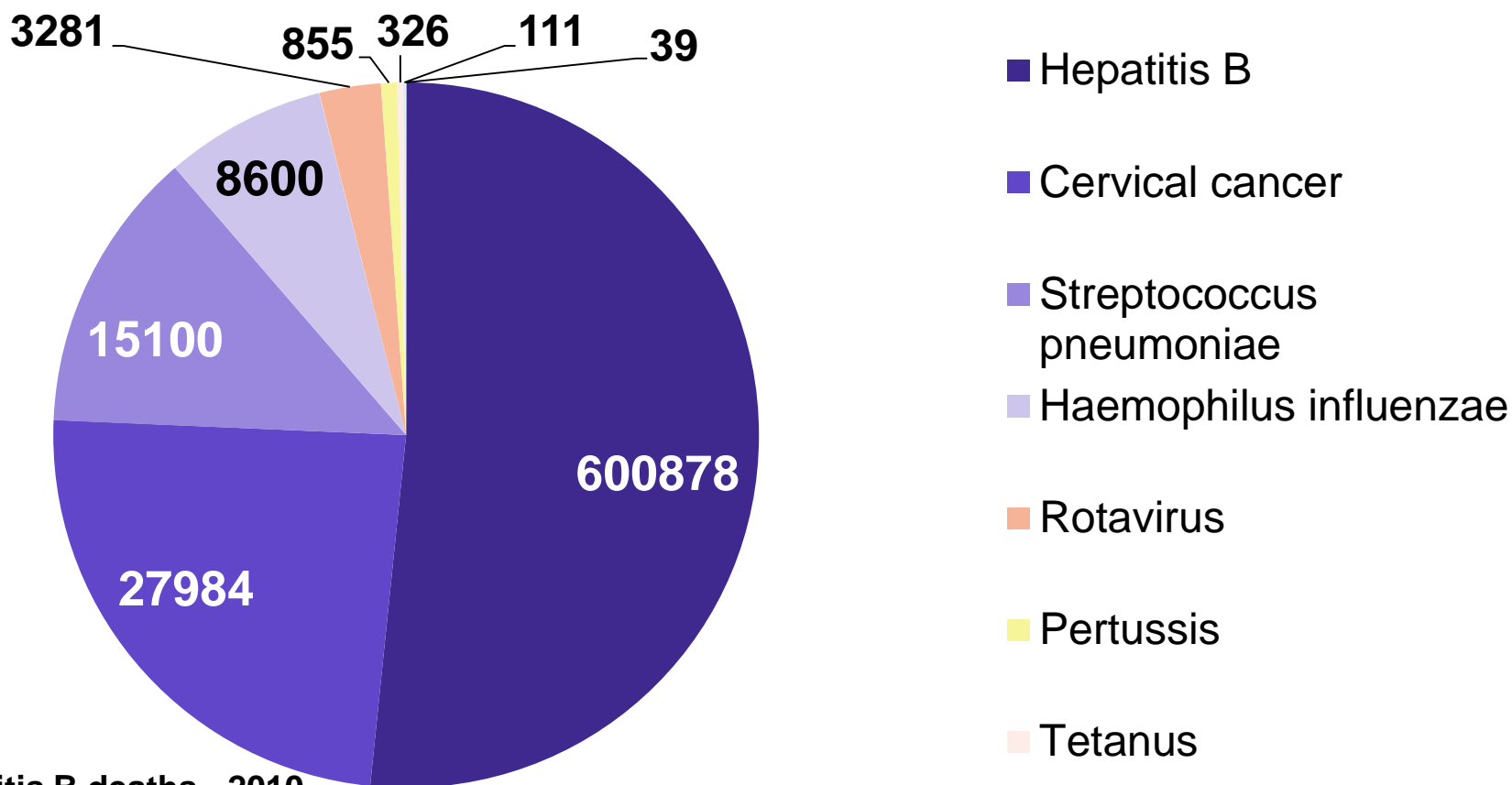
- 13 mln people live with chronic hepatitis B¹
- 60,000 people die due to hepatitis B infection annually²



¹V.D. Hope et al. / Epidemiol. Infect (2013) 1-17

²Global Disease Burden Estimate 2010, 2012

Deaths due to selected vaccine preventable diseases, WHO European Region, 2012*



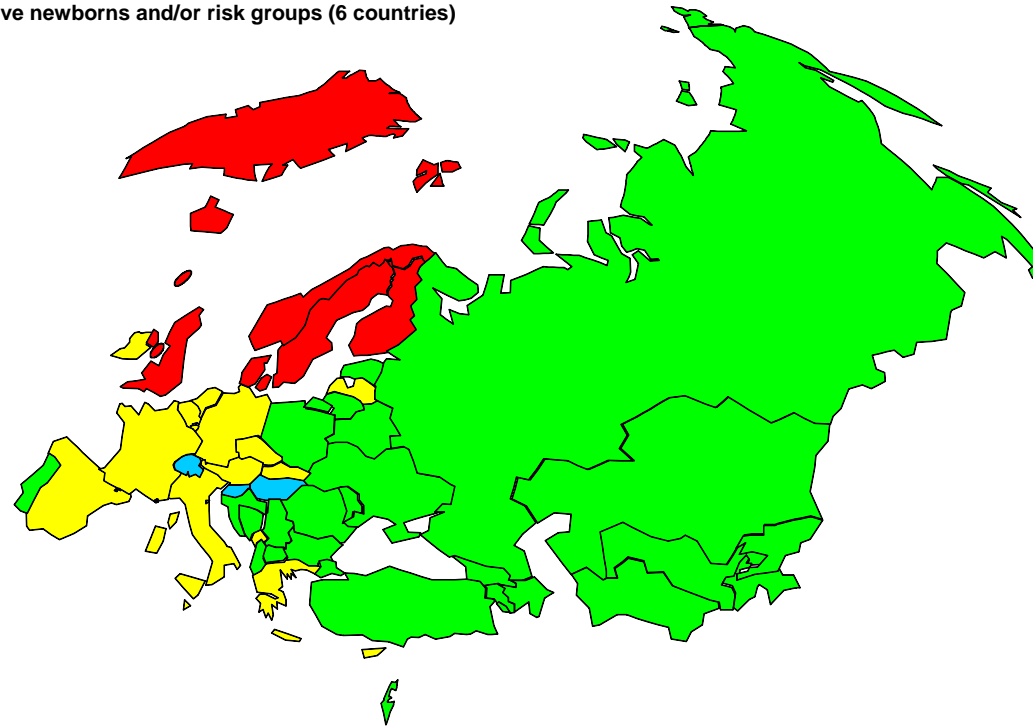
*Hepatitis B deaths - 2010

WHO position on Hepatitis B vaccine (2009)

- In all regional of the world, all infants should receive the first dose of HepB as soon as possible (<24 hours) after birth. This should be followed by two or three doses to complete the series
- Timely delivery of HepB birth dose (<24 hours) should be performance measure for all immunization programmes

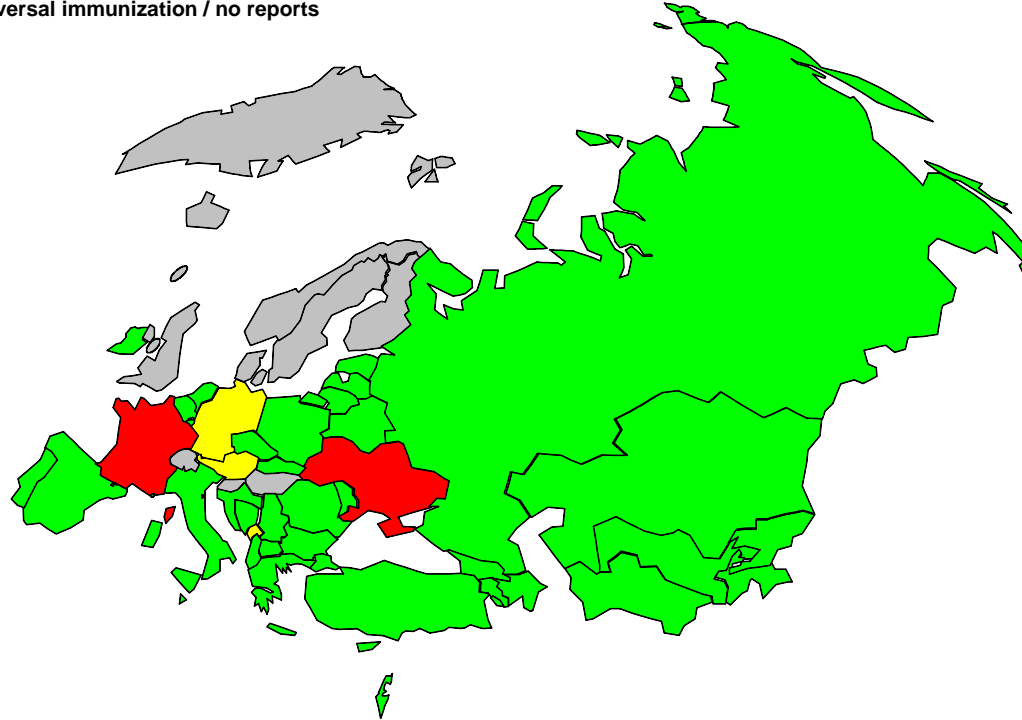
Hepatitis B immunization policy, WHO European region

- Universal newborns (26 countries)
- Universal infants (18 countries)
- Universal children/adolescents (3 countries)
- Selective newborns and/or risk groups (6 countries)



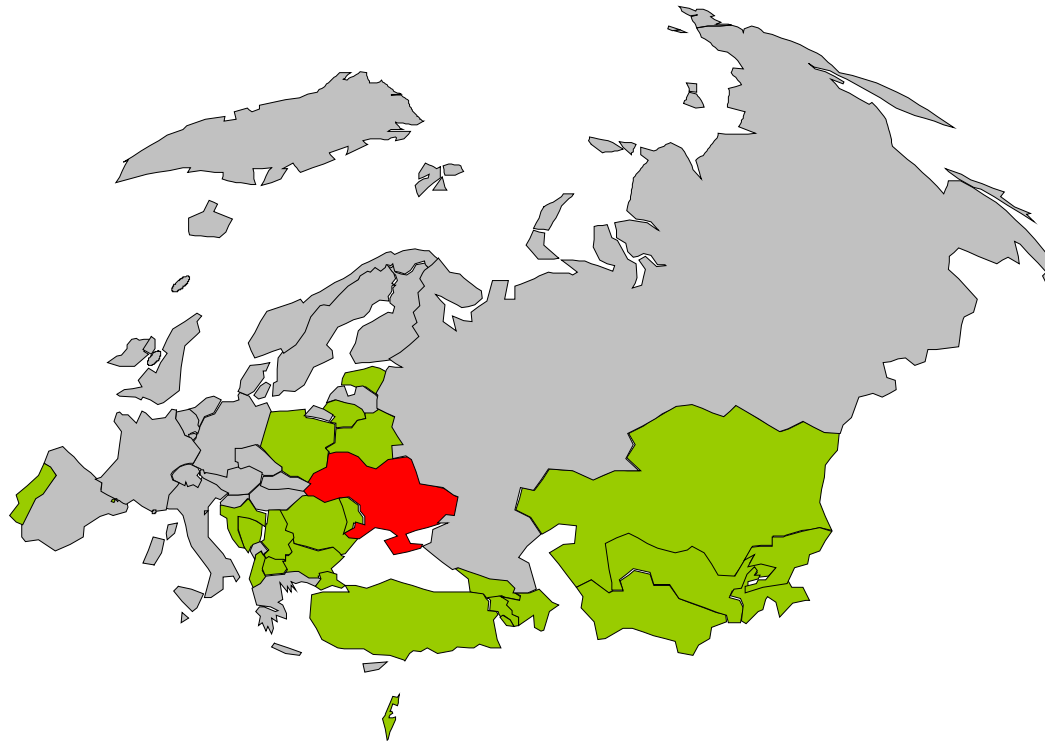
Source: 2013 JRF

HepB-3 coverage, WHO European Region, 2013



Source: 2013 JRF

Hepatitis birth dose coverage, 2013



Source: 2013 JRF

Unfinished agenda: universal vaccination

- 6 countries with low endemicity vaccinate high risk groups only
- Issues with risk group vaccinations:
 - substantial part of risk groups individuals are not reached; or reached when already infected
 - changing hepatitis B epidemiology due to migration – increasing horizontal or sexual transmission

Chu JJ, et al. / Eur J Public Health (2012) 067
R. van Houdt, et al. / Vaccine (2009) 3530-3535

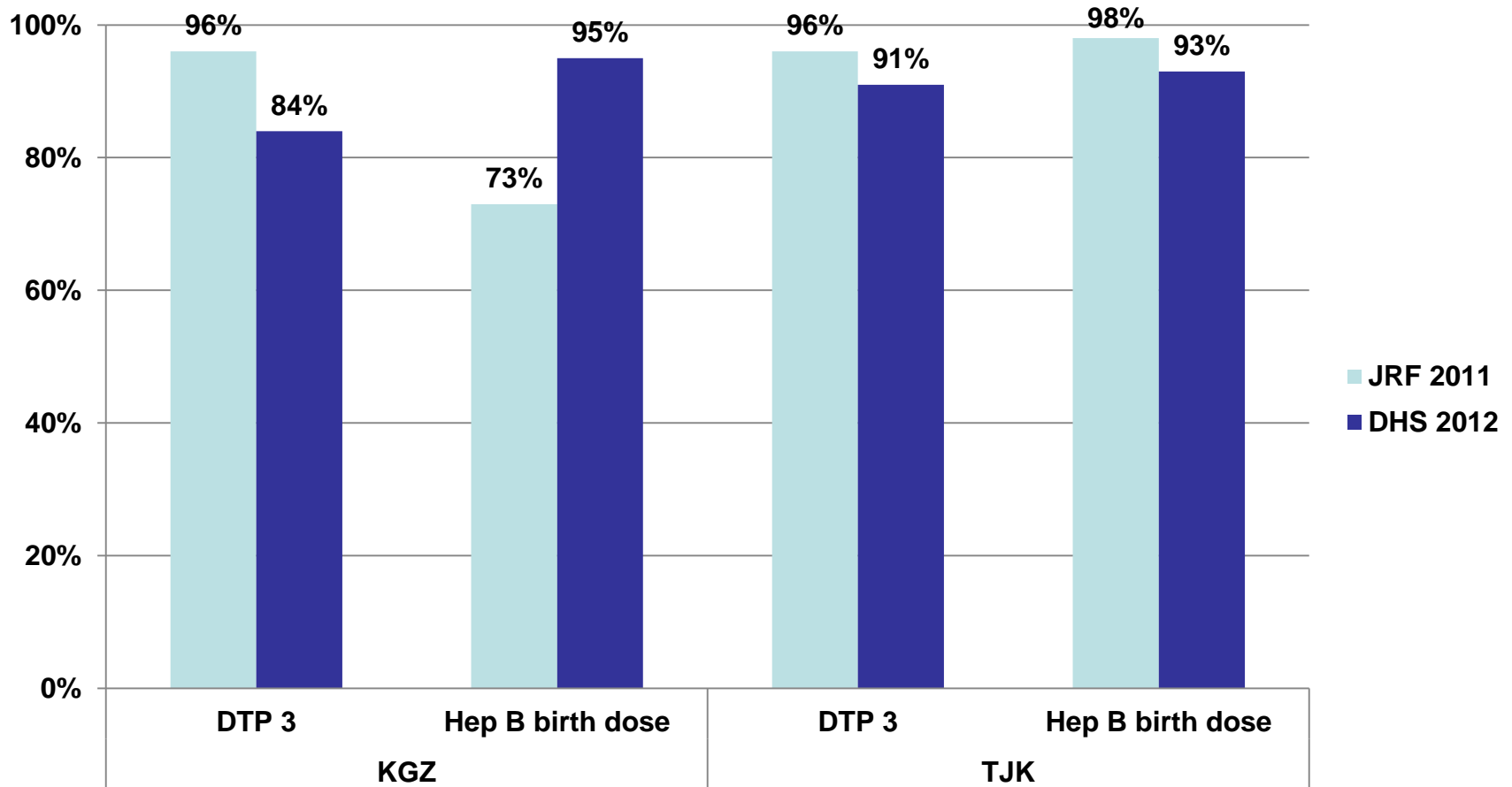
Challenges: prevention of parenteral transmission

- 21 countries implement universal children vaccination:
 - Lack of evidence on completeness of screening of pregnant women
 - Unclear follow-up immunization of infants (2-nd and 3-d doses)

Challenges: Hepatitis B vaccine coverage

- Most countries in the European region have achieved >90% immunisation coverage, BUT...
 - Timely provision of immunisation is a problem in several countries
 - Discrepancies between reported and survey data exist
 - National data often hides under-performing districts and low coverage in vaccine hesitant and hard to reach populations

JRF versus DHS coverage KGZ and TJK, 2012




European Action Plan: Vision

“A European Region free of vaccine-preventable diseases, where all countries provide equitable access to high-quality, safe, affordable vaccines and immunization services throughout the life course.”



European Vaccine Action Plan: Goals

- Sustaining polio-free status
 - Eliminating measles and rubella
 - Controlling hepatitis B
- 
- EVAP goals**
- Achievement of the vision and the outcomes of the actions undertaken within EVAP will be measured against the following EVAP goals.
- Sustain polio-free status.
 - Eliminate measles and rubella.
 - Control hepatitis B infection.
 - Meet regional vaccination coverage targets at all administrative levels throughout the Region.
 - Make evidence-based decisions on introduction of new vaccines.
 - Achieve financial sustainability of national immunization programmes.
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 - Making evidence-based decisions on introduction of new vaccines.
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European Vaccine Action Plan: Objectives

- All countries commit immunization as a priority
- Individuals understand the value of immunization services and vaccines and demand vaccination
- The benefits of immunization are equitably extended to all people through tailored, innovative strategies
- Strong immunization systems are an integral part of a well-functioning health system
- Immunization programmes have sustainable access to predictable funding and high-quality supply

2009 WHO position statement

- All regions/associated countries should develop goals for HBV control appropriate to their epidemiologic situations
- Control goals essential for regions and countries with intermediate/high endemicity of HBV infection or significant subpopulations with these levels of infection
- Serologic surveys of HBsAg serve as primary tool to measure impact of immunization and achievement of the control goals supplemented by acute disease surveillance and mortality data

Regional hepatitis B control goals

WHO Western Pacific Region

- **2005:** reducing chronic HBV infection rates (as measured by HBsAg seroprevalence) among children aged five years to less than 2% by 2012

WHO Eastern-Mediterranean Region

- **2009:** reduction in prevalence of chronic hepatitis B virus infection to less than 1% among children below 5 years of age by 2015, if they have not yet done so

WHO EURO Working Group on Establishment of Regional Hepatitis B Control Goal

Members

- Pierre Van Damme
- Mark Kane
- Daniel Shouval
- Selim Badur
- Paolo Bonanni
- Liudmila Mosina

Meetings

- 3 October 2014
- February 2015

EUROPEAN HEPATITIS B CONTROL VISION:

All children in the WHO European region will be hepatitis B free

European Regional Hepatitis B Control Goal 2016-2020

- First Milestone: Prevalence of HBsAg in children 5-10 yrs 0.5% or lower by serosurvey by 2020
- Universal sustainable immunization in all countries with 95% HB-3 coverage at national level
- Universal newborn immunization (<24 hours of birth) or effective universal screening of pregnant women and post exposure prophylaxis of carrier children

Conclusion

- Significant progress achieved in prevention of HBV transmission through universal immunization, however challenges remain
- European Vaccine Action Plan provides opportunities and strategies to:
 - increase / sustain high hepatitis B coverage
 - establish regional hepatitis B control goal and verify its achievement