



Programme for HIV, STI and blood-borne infections

# Enhanced surveillance of hepatitis B and C in the EU/EEA

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Once again I would like to apologise for not being able to attend the meeting

I do have some ready prepared slides on the data collected through the enhanced surveillance system for 2006 – 2011 data that I presented at the Network meeting in April. You are most welcome to use these slides but the key issue to emphasize is that the data are weak with severe limitations as highlighted in the report – with data more reflective of testing and differences in surveillance than the underlying epidemiology (with perhaps the exception of acute hepatitis B) – see enclosed report.

With regards

Erika

# Outline of the presentation



- Overview of enhanced surveillance programme for hepatitis B and C across EU/EEA countries
- Results from 2006 to 2011 data collection
- Summary of the key issues from the data collection
- Outline of the next steps for surveillance

# Enhanced surveillance of hepatitis B & C



- European Commission and the Founding Regulation (2005) provide a strong mandate for surveillance of communicable diseases within the EU/EEA
- ECDC coordinates the enhanced surveillance of hepatitis B and C across EU/EEA countries
- A Coordination Group was set up in 2010 to oversee the implementation of enhanced surveillance
- First meeting of the European Network for Hepatitis B and C surveillance in March 2011
- Revised case definitions presented to EU Network Committee September 2011

# Enhanced surveillance of hepatitis B & C

## - Specific objectives



1. Collect all newly diagnosed and reported cases of hepatitis B and C
2. Distinguish between different presentations (acute/chronic)
3. Describe the prevalence of infection in the general population and in populations at high risk for infection
4. Identify health care acquired infections
5. Monitor hepatitis B and C related morbidity and mortality

# Enhanced surveillance of hepatitis B & C

## - Variables

Type	Variable Name	Mandatory	Hepatitis B	Hepatitis C
<b>Core set</b>				
	RecordId	Y	√	√
	RecordType	Y	√	√
	RecordTypeVersion	N	√	√
	Subject	Y	√	√
	DataSource	Y	√	√
	ReportingCountry	Y	√	√
	DateUsedForStatistics	Y	√	√
	Status	N	√	√
	DateOfNotification	N	√	√
	DateOfDiagnosis	Y	√	√
	PlaceOfResidence	N	√	√
	PlaceOfNotification	N	√	√
	Age (years)	Y	√	√
	Gender	Y	√	√
	DateOfOnset	N	√	√
	Outcome	N	√	√
	Classification	Y	√	√
<b>Disease-specific</b>				
	StageHEP	Y	√	√
	ResultHBeAg	N	√	NA
	TestingLocation	N	√	√
	CountryOfBirth	N	√	√
	CountryOfNationality	N	√	√
	Imported	N	√	√
	ProbableCountryOfInfection	N	√	√
	Transmission	Y	√	√
	SexWorker	N	√	√
	HealthCareWorker	N	√	√
	HIVStatus	N	√	√
	HBVStatus	N	NA	√
	HCVStatus	N	√	NA
	VaccStatus	N	√	NA
	Complications	N	√	√
	Genotype	N	√	√

# Enhanced surveillance of hepatitis B & C

## - Principles



- Data from Member States is uploaded into the European Surveillance System (TESSy)
  - TESSy was created according to ECDC's founding regulation for the reporting of routine surveillance data
- Case-based and aggregate reporting of data possible
- Data will be collected on a yearly basis after initial two data collections:
  1. 2006-2010 data collected December 2011-January 2012
  2. 2011 data collected September - October 2012

# Results from first data collections

## Hepatitis B



28 countries provided hepatitis B data in 2011

- 14 countries could only provide data on acute cases

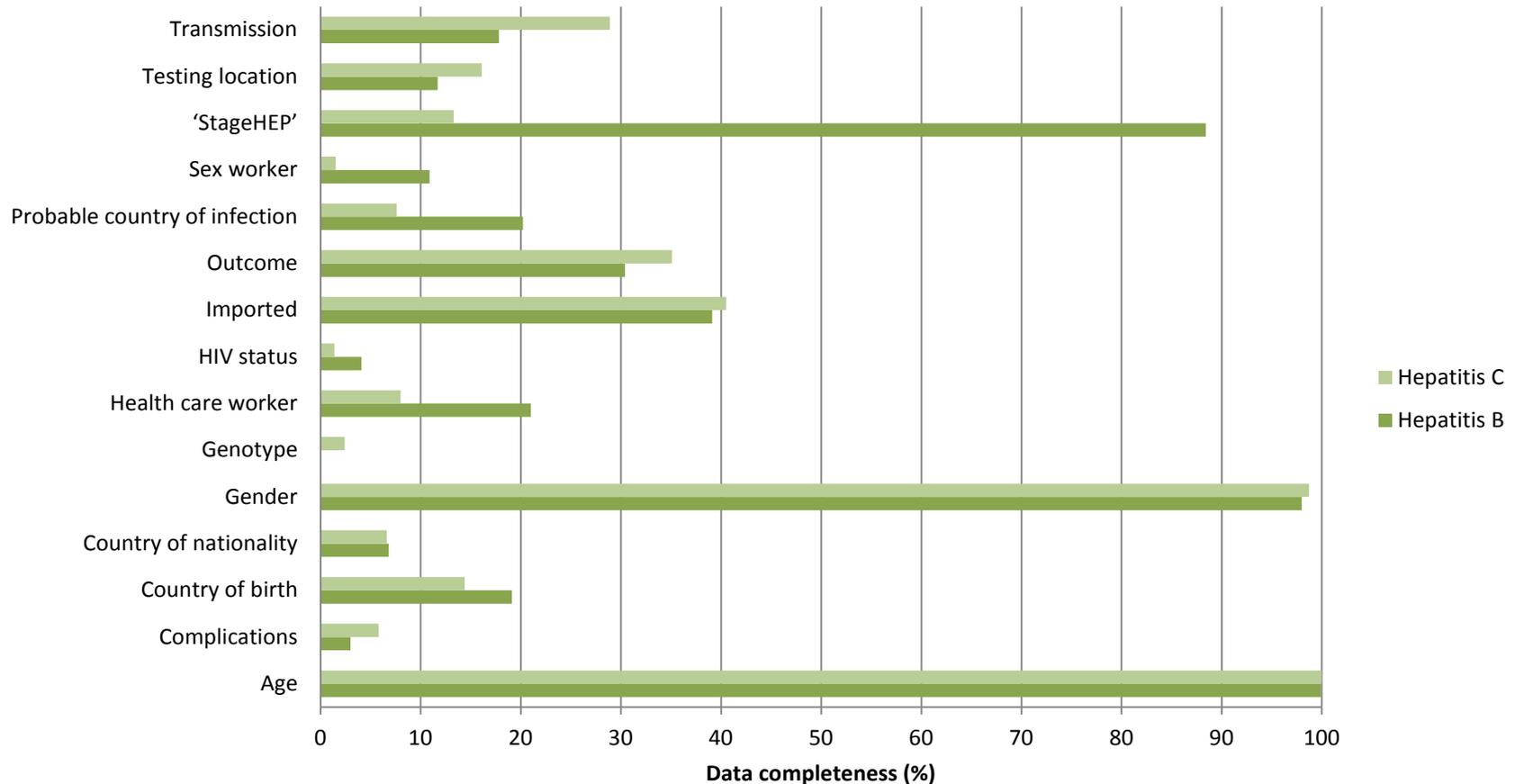
Case definitions varied:

- 18 countries used the revised EU case definition
- 6 countries used the EU 2008/EU 2002 case definitions
- 4 countries used national case definitions

24 countries were able to classify cases as acute or chronic using the stageHEP variable

# Results from first data collections

## Data completeness in 2011



# Key issues from first data collection

## Hepatitis C



26 countries provided hepatitis C data in 2011

- 5 countries could only provide data on acute cases

Case definitions varied:

- 15 countries used the revised EU case definition
- 7 countries used the EU 2008 case definition
- 4 countries used national case definitions

13 countries were able to classify cases as acute or chronic using the stageHEP variable

# Results from first data collection

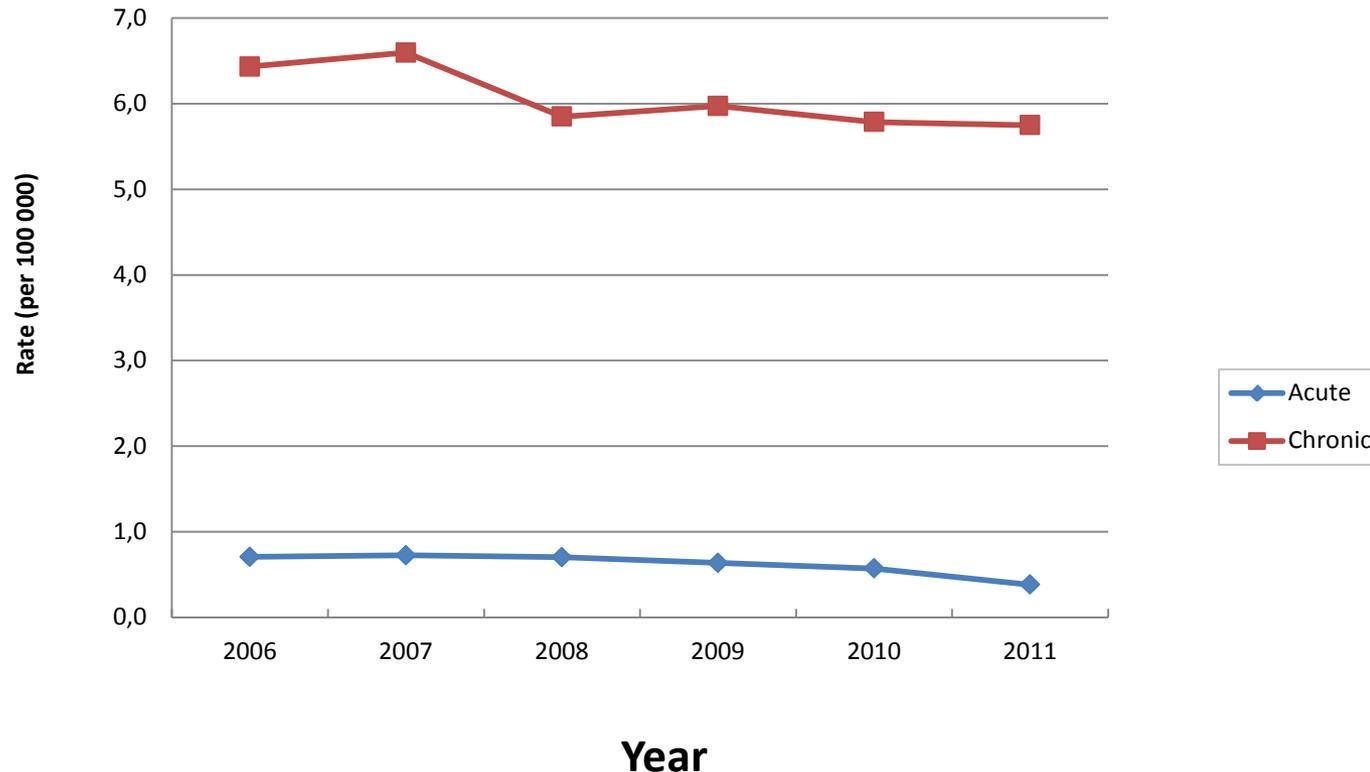
## Hepatitis C



- In 2011, 29 896 hepatitis C cases were notified:
  - 398 (1%) Acute
  - 2913 (10%) Chronic
  - 24 337 (81%) Unknown
- Variation in overall numbers and rates between countries
  - Rates of reported acute infections ranged from <math><0.1</math> in Portugal, Hungary and Ireland to 2.0 in Austria
  - Rates of reported chronic infections ranged from 0.1 in Greece to 14.0 in Estonia
- Among countries with consistent reporting of acute and chronic cases between 2006 and 2010 there were fluctuating trends

# Acute and chronic hepatitis C cases in EU/EEA countries, 2006-2011

Number per 100000 population



Source: Country reports from countries with consistent reporting of acute and chronic infections between 2006 and 2011 (Denmark, Estonia, Slovakia, Slovenia).

# Results from first data collection

## Hepatitis C



- Just over half of all cases were aged between 25 and 44 (54% cases)
  - 11% were aged under 25
- The overall male to female ratio was 2:1
- Transmission mode (29% complete):
  - Acute: Injecting drug use (33%); nosocomial (17%); men who have sex with men (24%)
  - Chronic: Injecting drug use (84%); nosocomial (5%); blood and blood products (3%)
- The migration variables were poorly reported but implied that migration contributes towards hepatitis C infections in Europe but this is less significant than for hepatitis B

# Reported total hepatitis C cases in 2011\*

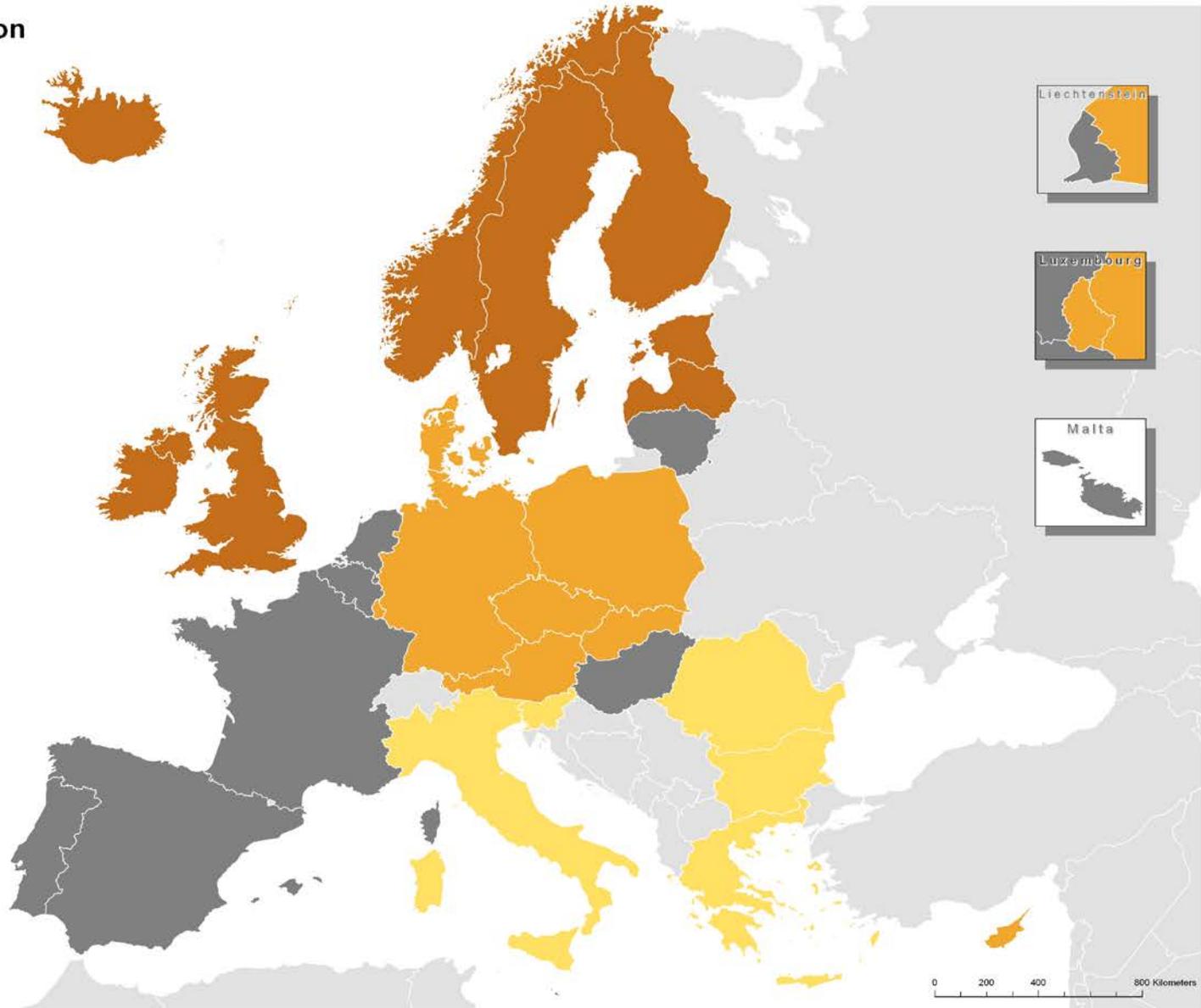


Number per 100 000 population



No data

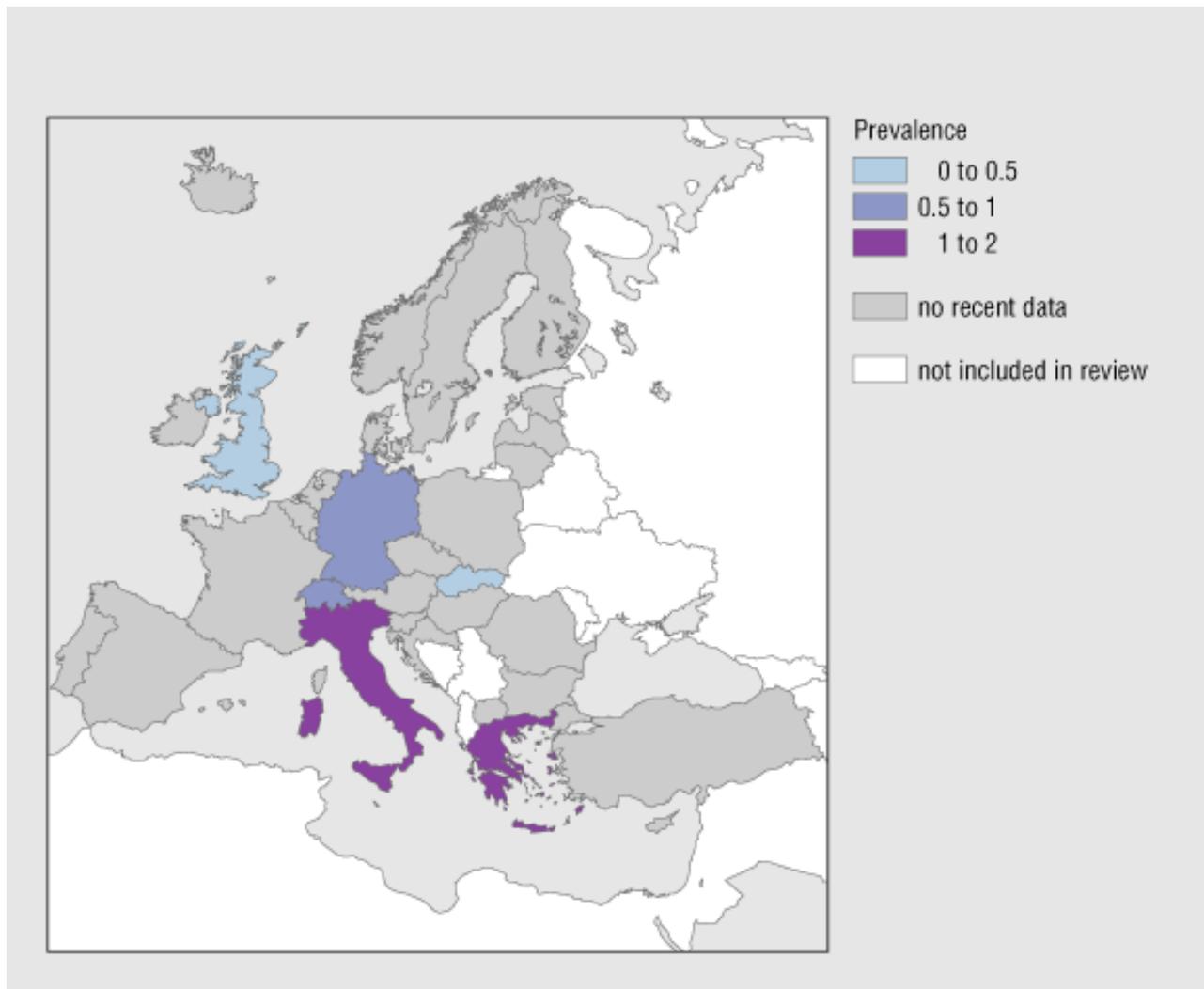
Non EU/EEA countries



© EuroGeographics for the administrative boundaries

\*Countries included if their surveillance systems captured data on **both acute and chronic cases.**

# Anti-HCV prevalence among pregnant women



# Key limitations of the data



- Many countries only collect data on **acute** hepatitis cases
- Difficulties with defining cases using **StageHEP** criteria
  - Many cases (especially hepatitis C) coded as unknown
  - Some countries used their own criteria
- Data **completeness** low (<10%) for certain variables:
  - Genotype, complications, country of nationality, HCV status (for HBV cases), HBV status (for HCV cases), HIV status, sex worker, healthcare worker
- **Under-reporting** in some countries
  - Estimated by France to be as high as 85% for acute hepatitis B cases
- **Changes** in reporting practice **over time**
- Different **case definitions** used by countries

# Summary of key findings



- High numbers of reported hepatitis B and C cases across Europe
  - Cases of hepatitis C double those of hepatitis B
  - Chronic cases dominate across both diseases
  - Variation between countries
- For hepatitis B figures suggest a decrease in acute cases and a rise in newly reported chronic infections
- For hepatitis C, there is a strong geographical trend
- Transmission routes for hepatitis B differ from hepatitis C, and for hepatitis B these routes varied by disease status
- Imported cases are significant, especially for chronic hepatitis B infections

# Next steps for enhanced surveillance



- Report on 2006 – 2011 data will be published around World Hepatitis Day in July 2013
- Collection of 2012 data during summer/autumn 2013
- Further discussions around surveillance in working groups
  - Case definitions
  - Alternative methods of surveillance
  - Surveillance outputs
- Possibly: Meeting of a hepatitis surveillance working group later in 2013

# Acknowledgements



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