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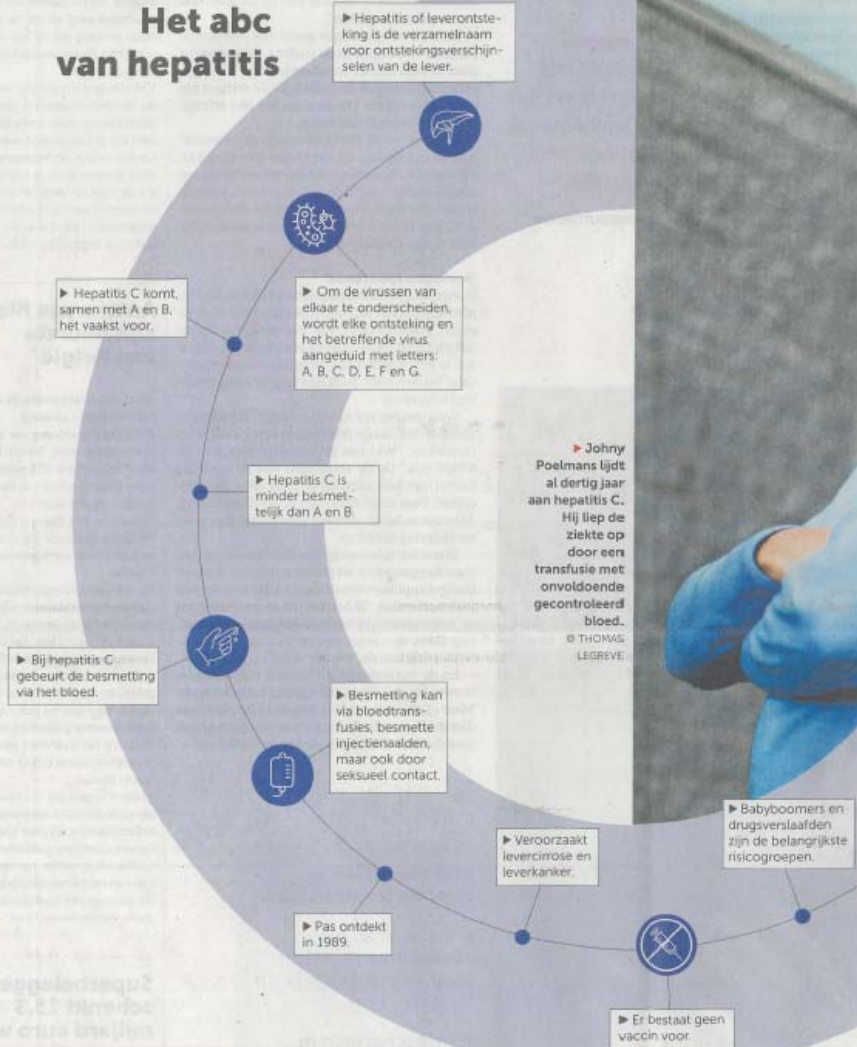
Overview of surveillance system and epidemiology of hepatitis B and C, Belgium

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VHPB 7-8/11/2017

Hepatitis C bijna uitgeroeeid

Het abc van hepatitis



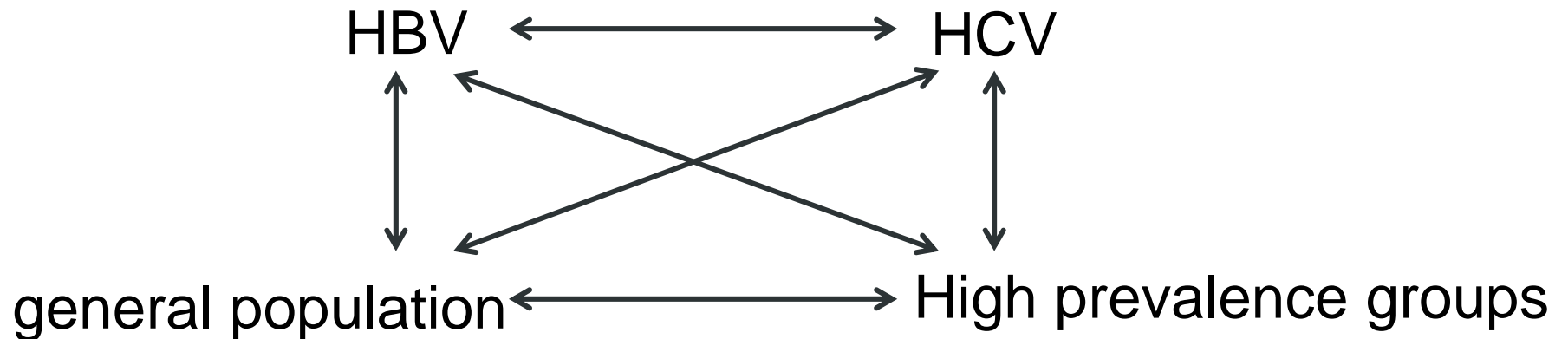
► Johnny Poelmans lijdt al dertig jaar aan hepatitis C. Hij liep de ziekte op door een transfusie met onvoldoende gecontroleerd bloed.
© THOMAS LEGREVE



indien het werd voorgeschreven door artsen die zijn verbonden aan een universitair ziekenhuis. Ook komen enkel patiënten in aanmerking bij wie al sprake is van leverschade, tot grote onvrede



Agenda



!!!!There are no epidemiologic data available!!!!

!!!!No awareness and no screening policy available!!!!

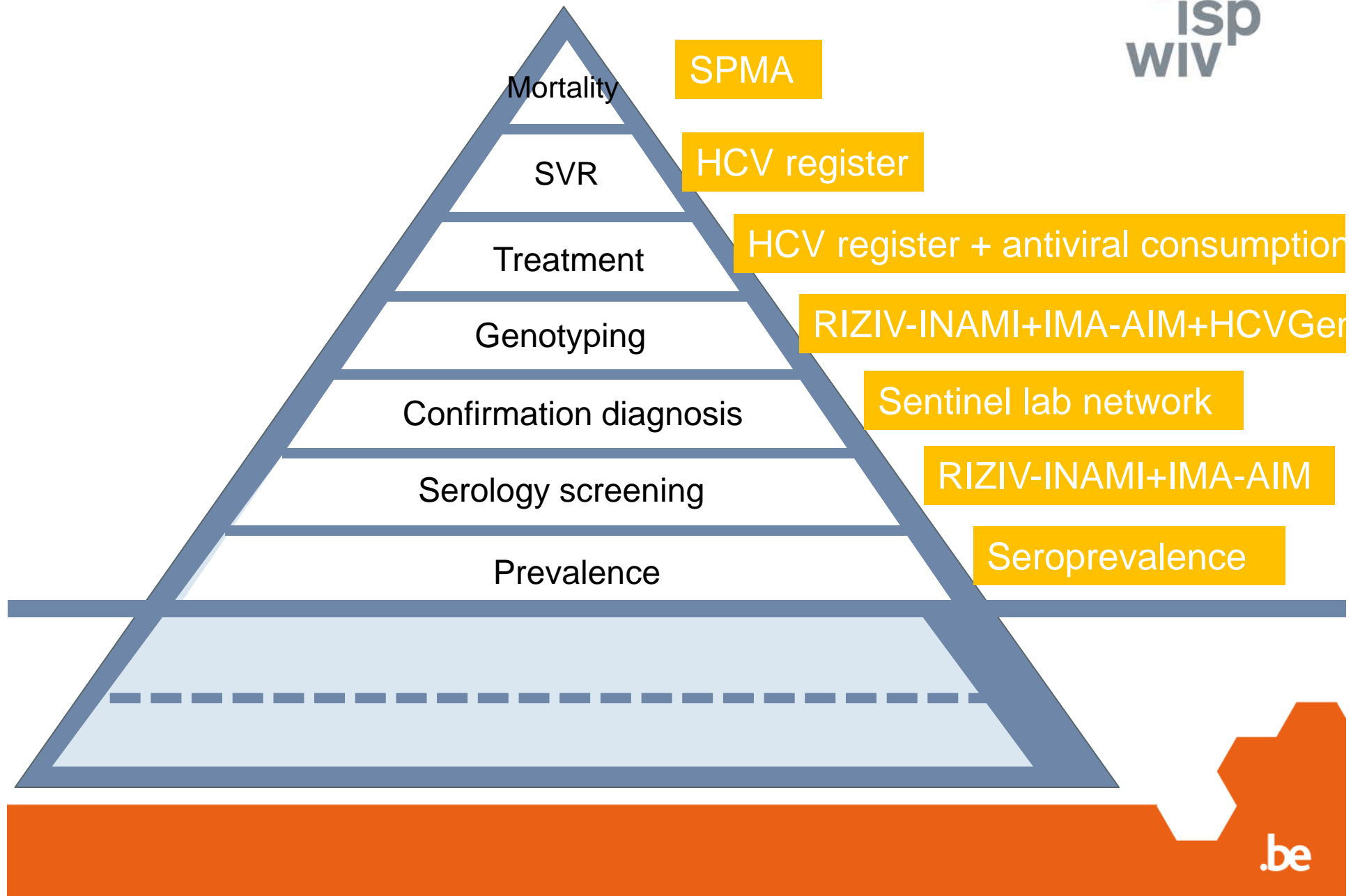
!!!!HCV infected patients are not aware of their status!!!

General population: Available surveillance systems

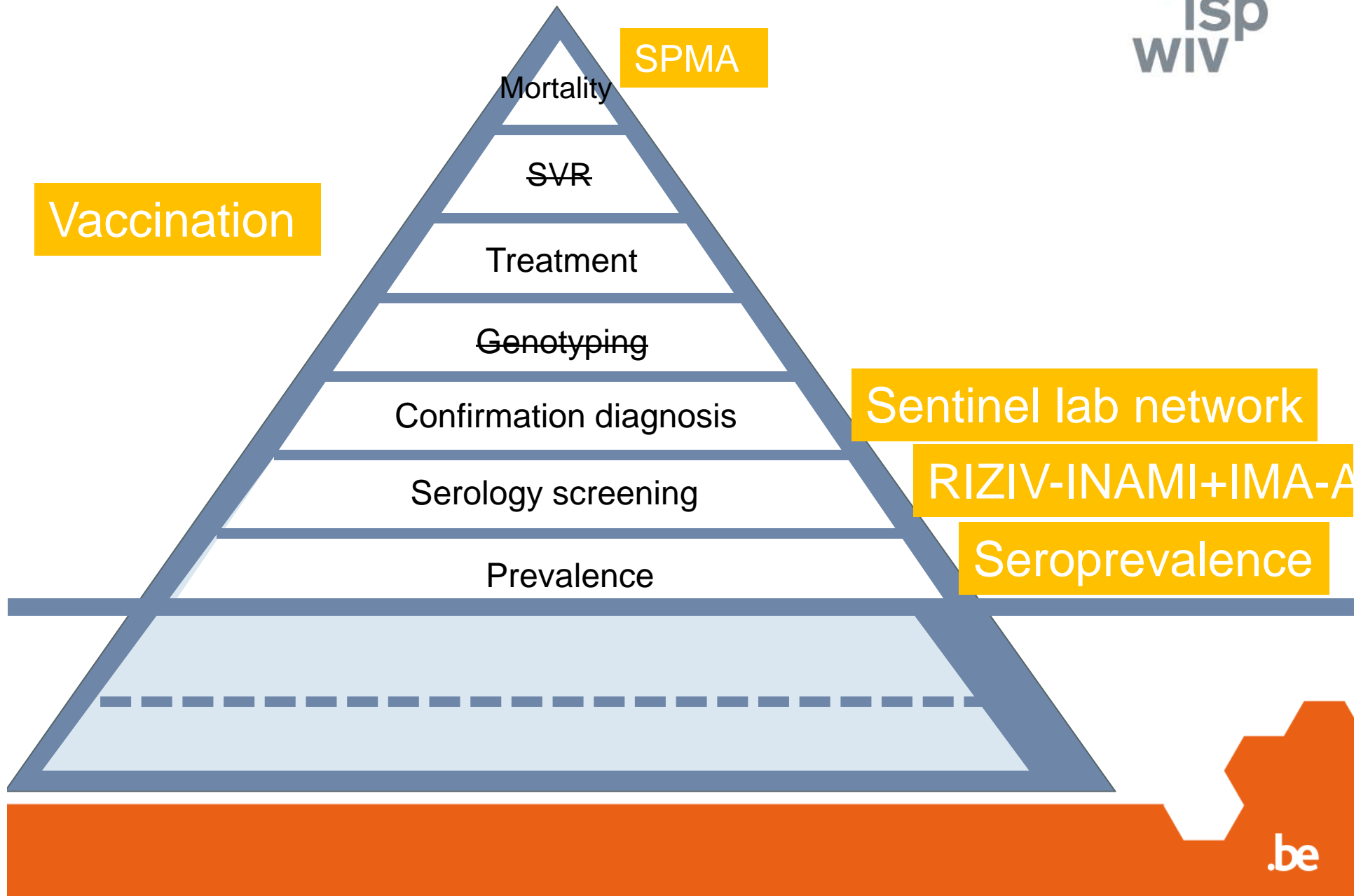


- Mandatory notification
- Seroprevalence studies
- RIZIV-INAMI
- IMA-AIM
- Sentinel lab network
- Blood bank
- HCV register
- Vaccination registers
- Mortality data

Surveillance of HCV



Surveillance of HBV



Mandatory notification



Zorg en Gezondheid (Flemish community):

- Acute HBV
- No HCV notification

AViQ (Walloon region):

- No HBV notification
- No HCV notification

BXL:

- hepatitis

HCV seroprevalence studies



Previous studies

Year	region	result	N (age)	Test method	ref
1993-94	Flanders	0,87%	4055 (0->65+)	HCV Ab	Beutels et al.
2003	Flanders	0,12%	1834 (0->65+)	Oral sample, HCV Ab	Quoilin et al.

RIZIV-INAMI



Nomenclature:

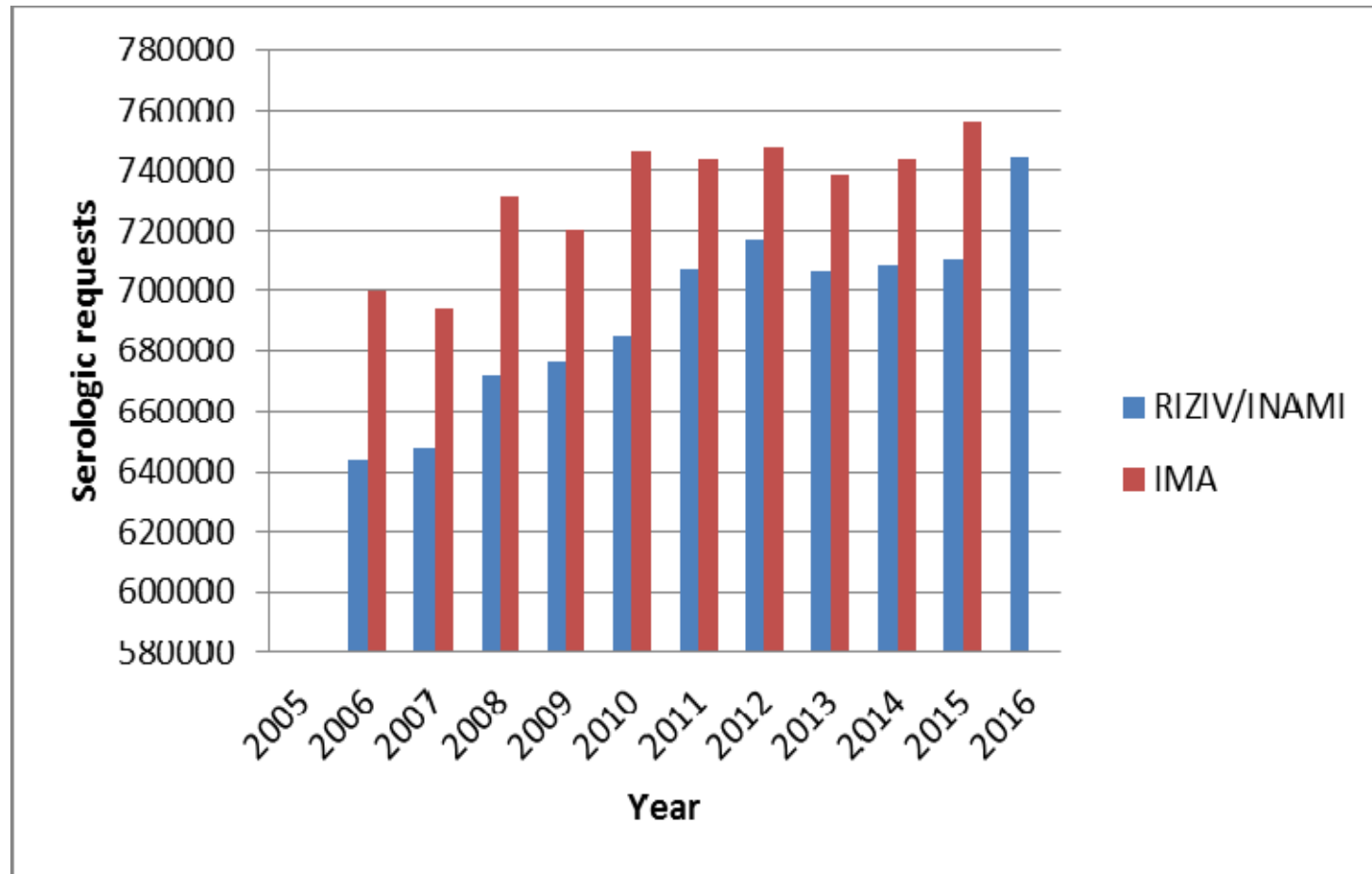
- 551154 en 551165: HCV ab (from 1/3/1995).
- 556710 en 556721: RNA-PCR (from 1/6/2008)
- 556732 en 556743: Q-PCR (from 1/6/2008)
- 556754 en 556765: Genotyping (from 1/6/2008)
- 550233 en 550244: confirmation test (1/12/01-26/2/10)

AIM-IMA (intermutualistic agency) permanente steekproef (EPS) L'échantillon permanente



- From 2002
- 7 “mutuality” agencies
- 305.000 Belgian residence
 - 1/40 (age 0-65 y)
 - 1/20 (age >65y)

Number of HCV serology requests

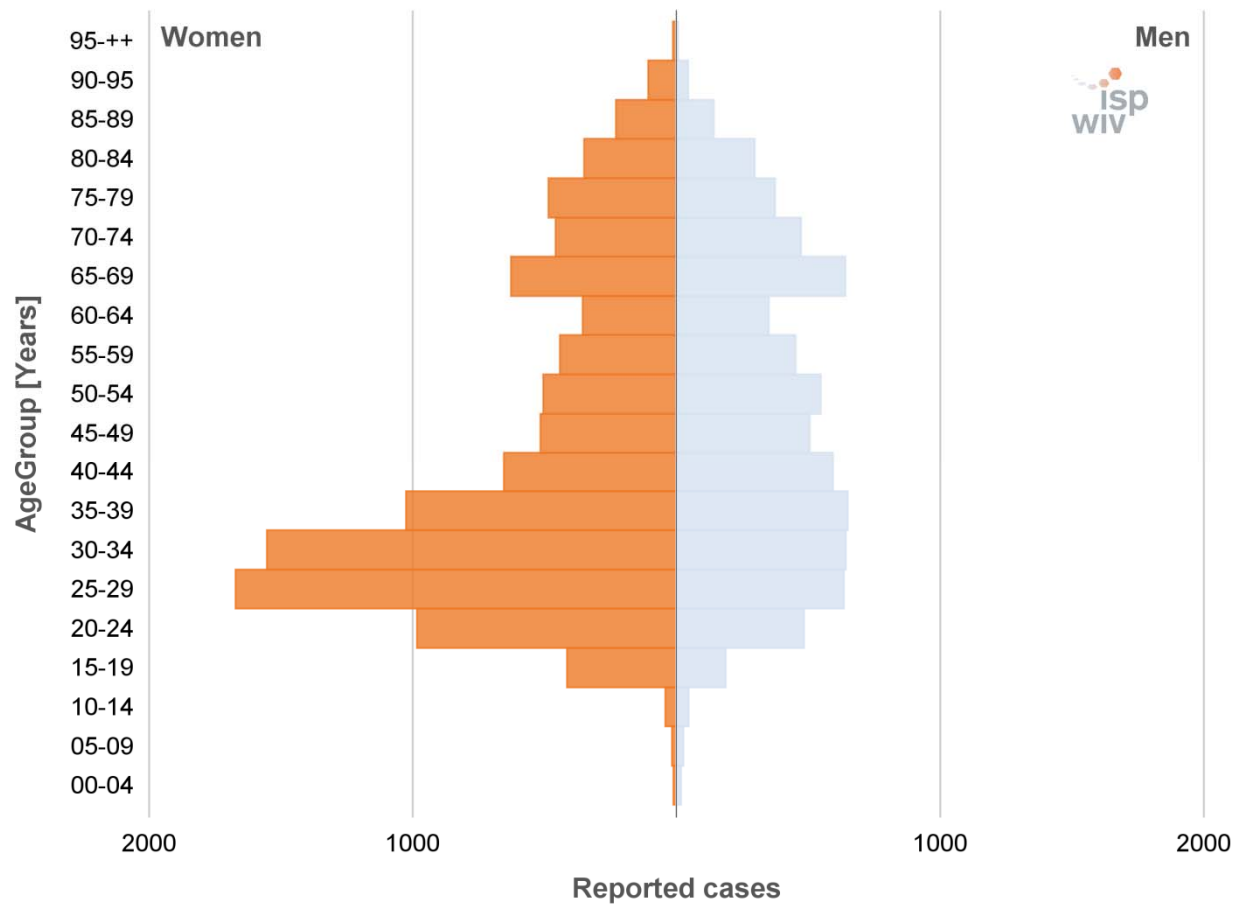


Number of HCV serology requests, 2015

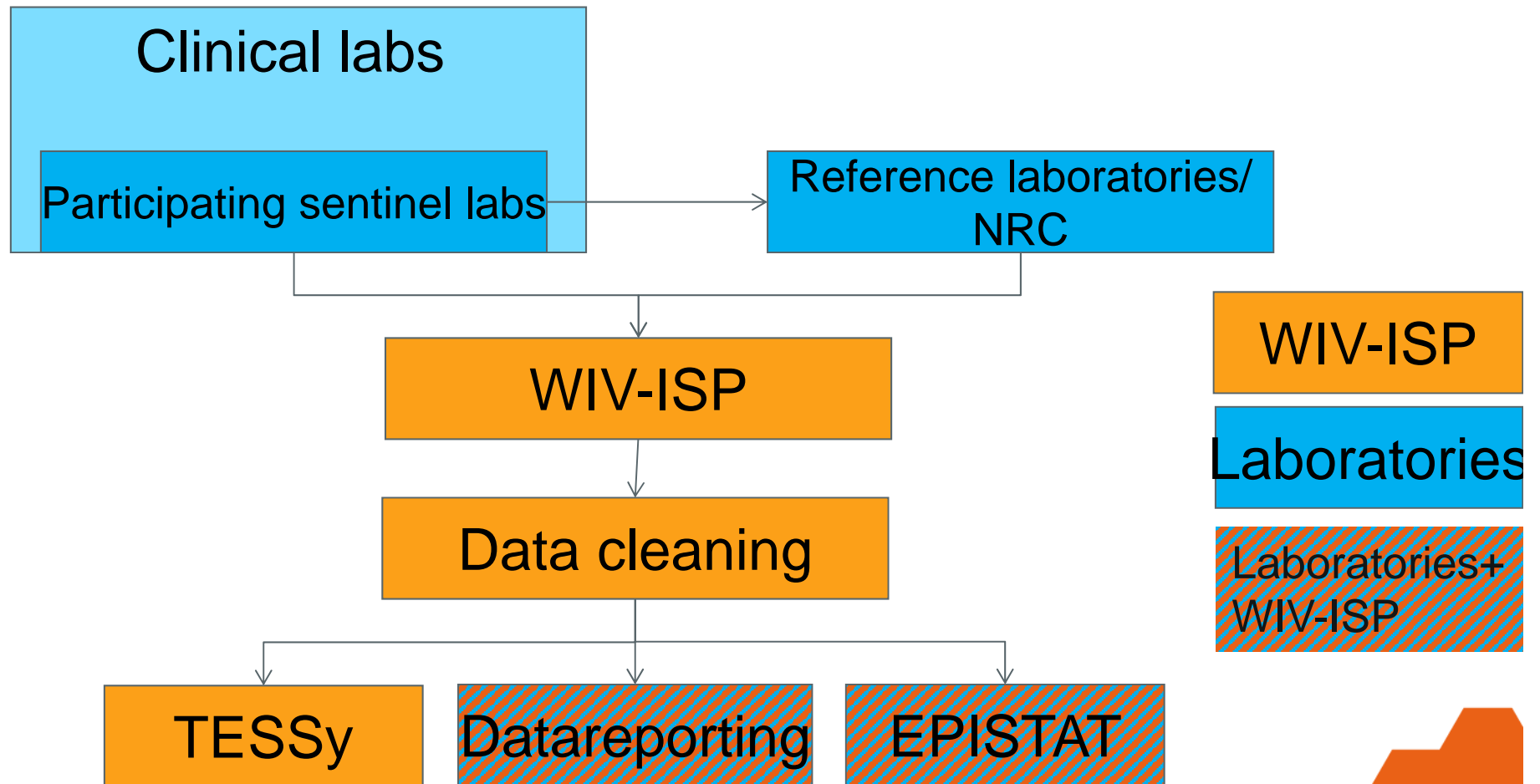


- 756.617 serology tests performed
- For 644.453 unique patients
- For 270.713 (42,0 %) of these no serology test performed during 9 previous years
- During 9 previous years 3.679.427 patients were screened or 33,4% of the Belgian population
- Yearly, 2,5% new patients of the Belgian population screened.

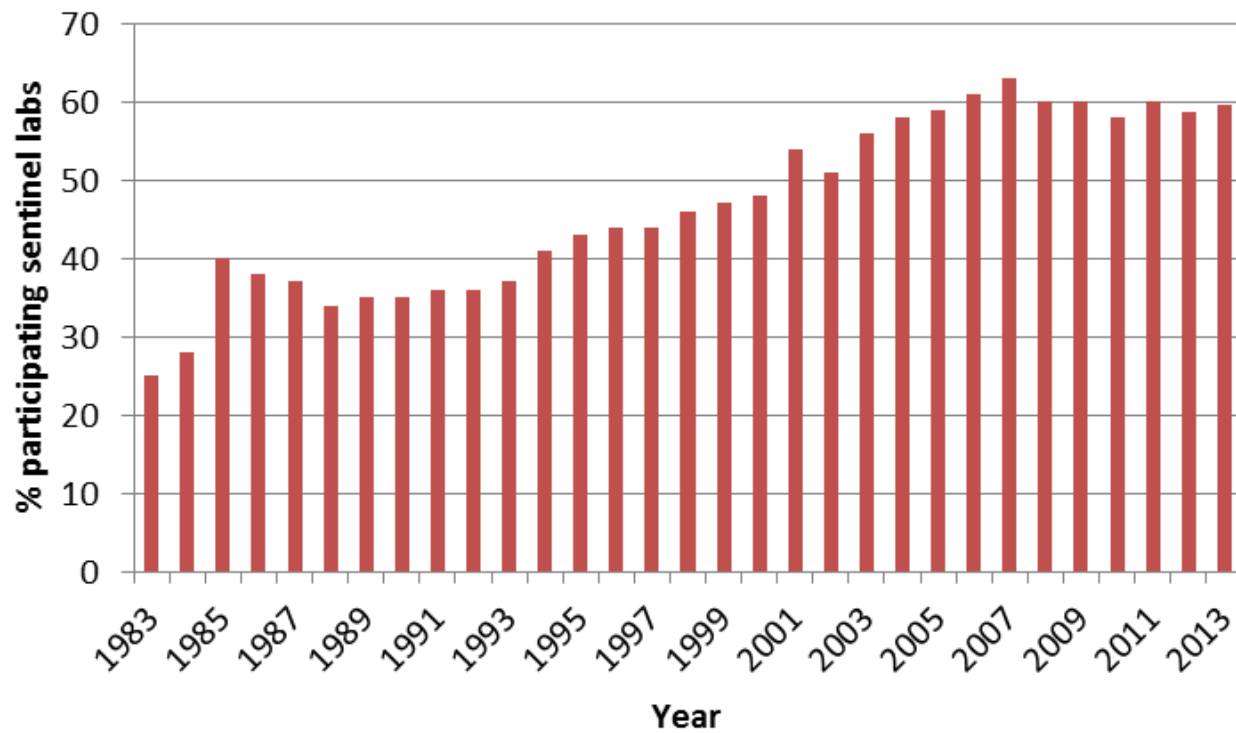
Gender and age distribution, HCV serology testing, AIM-IMA, 2015



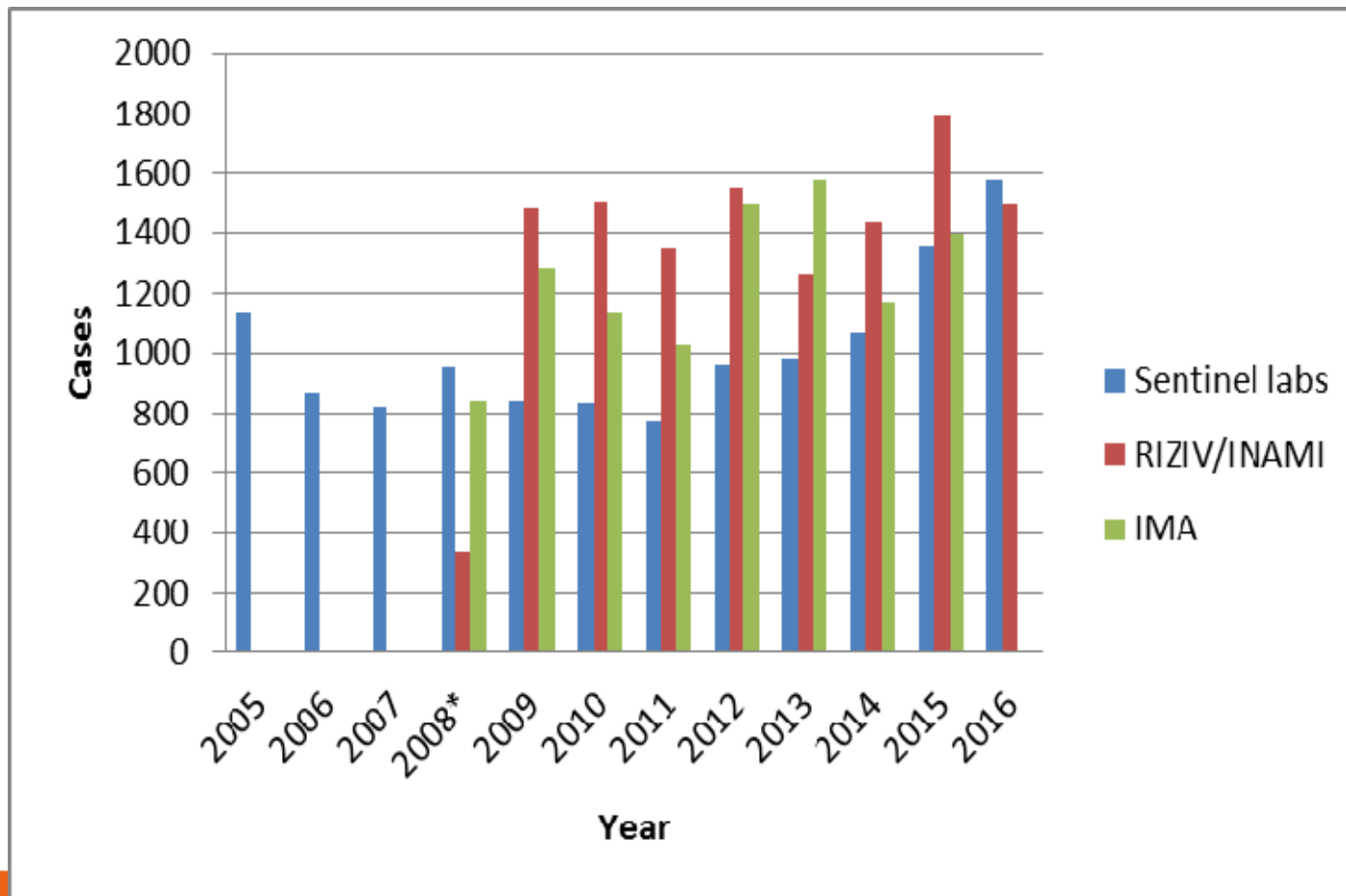
Organisation sentinel laboratory network



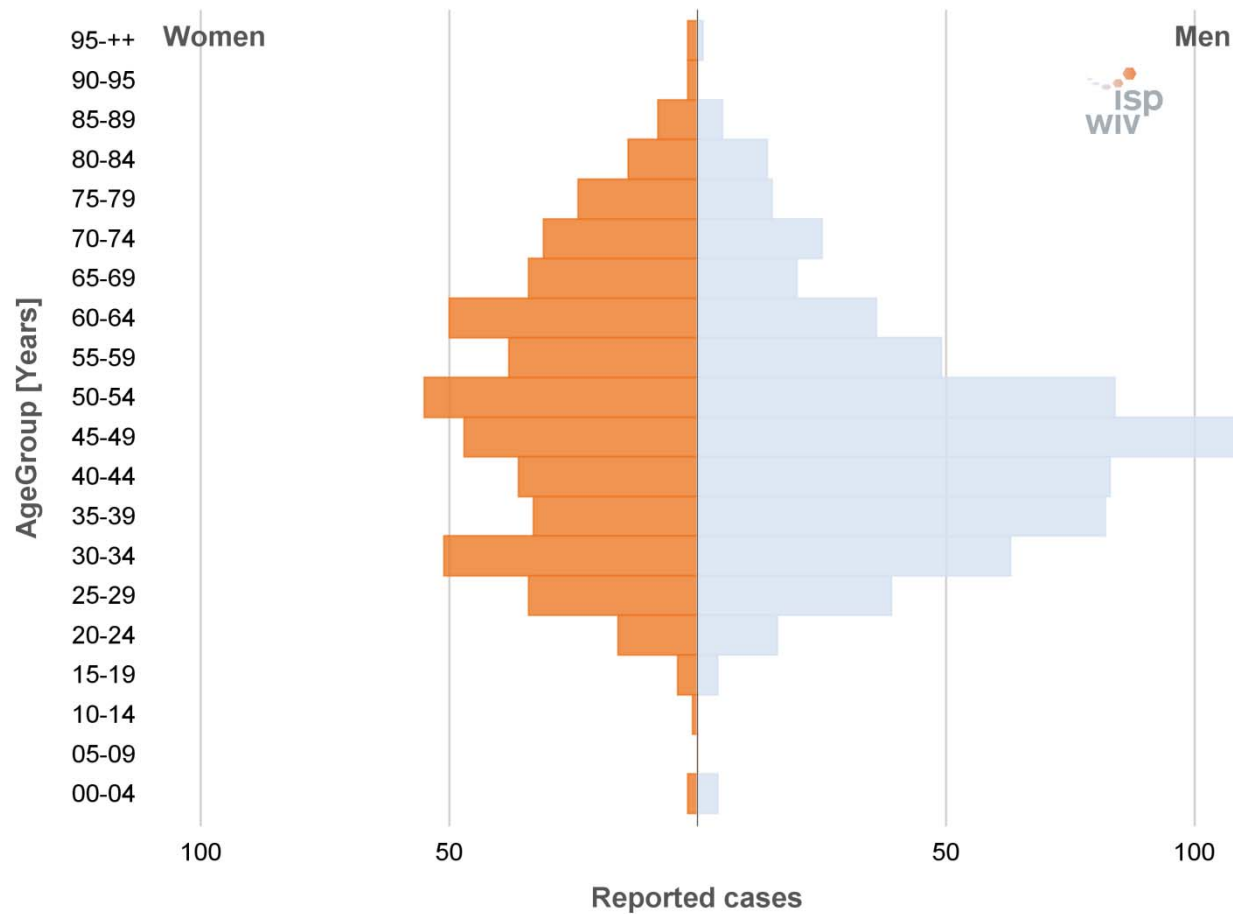
Percentage lab participations



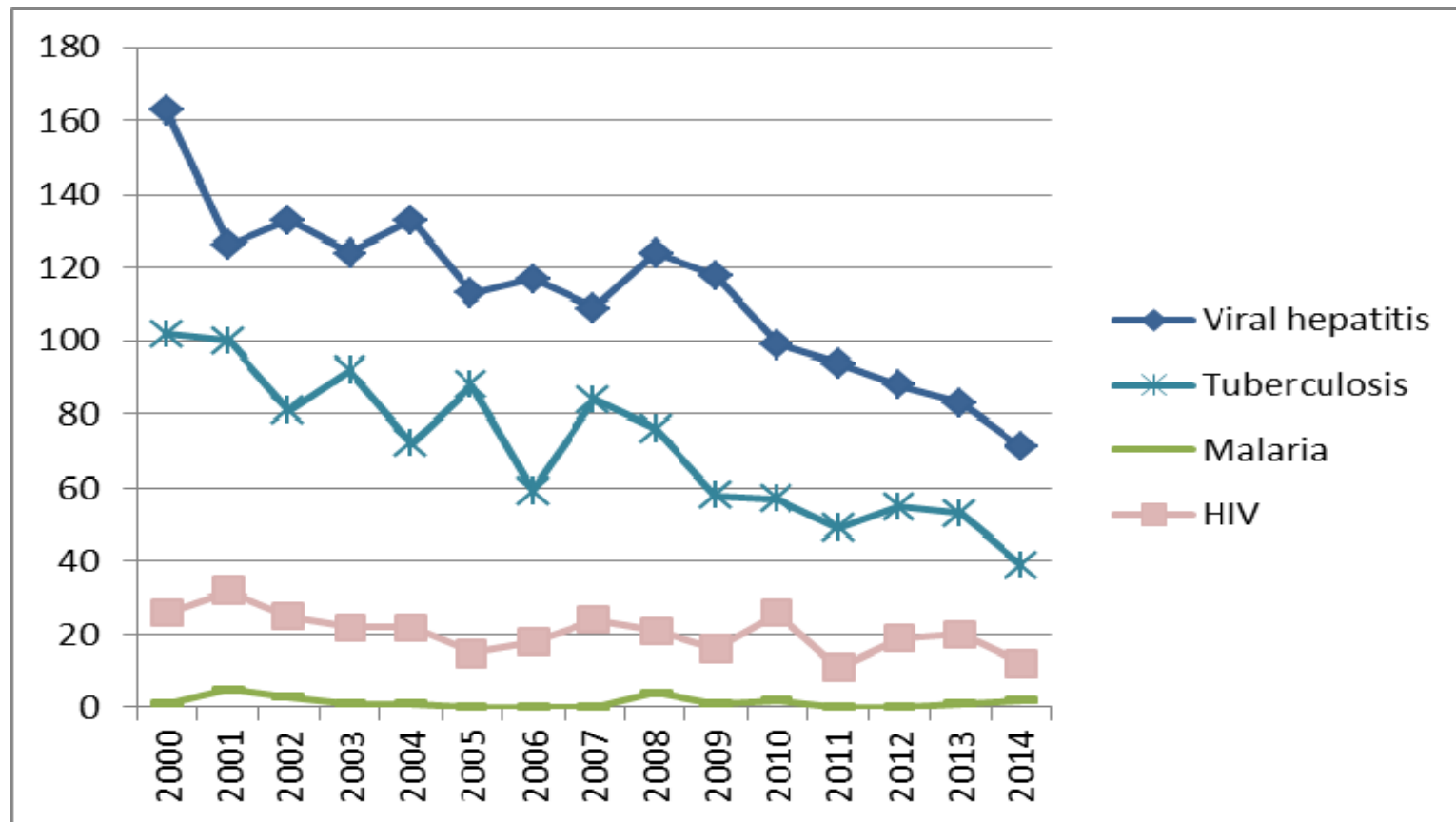
Number of genotyping analysis (RIZIV/INAMI; AIM-IMA), number of records by sentinel lab network



Gender and age distribution, sentinel lab network, HCV, 2016



Mortality



HCV Risk factors and seroprevalence within high prevalence groups



- IVD users
- Prisons
- Migrants
- HIV co-infection
- Babyboom generation
- Healthcare workers and nosocomial infections

HCV seroprevalence within high prevalence groups: IVD users – study 1



- In 2010; 10.100 IVD users
- 43% HCV infected (34% - 57%)

HCV seroprevalence within high prevalence groups: prisons



Worldwide

- Based on literature study (year of publication 2005-2015)
- 10,2 million prisoners
- 15,1% HCV infected
- 3,8% HIV, 4,8% HBV and 2,8% tuberculose

Belgium

- 2014: 11.769 prisoners*
- **2006-2008: Lantin, 3710 new entrees, 14,6% anti-HCV
- ***Similar data in prisons Flanders 10-15%

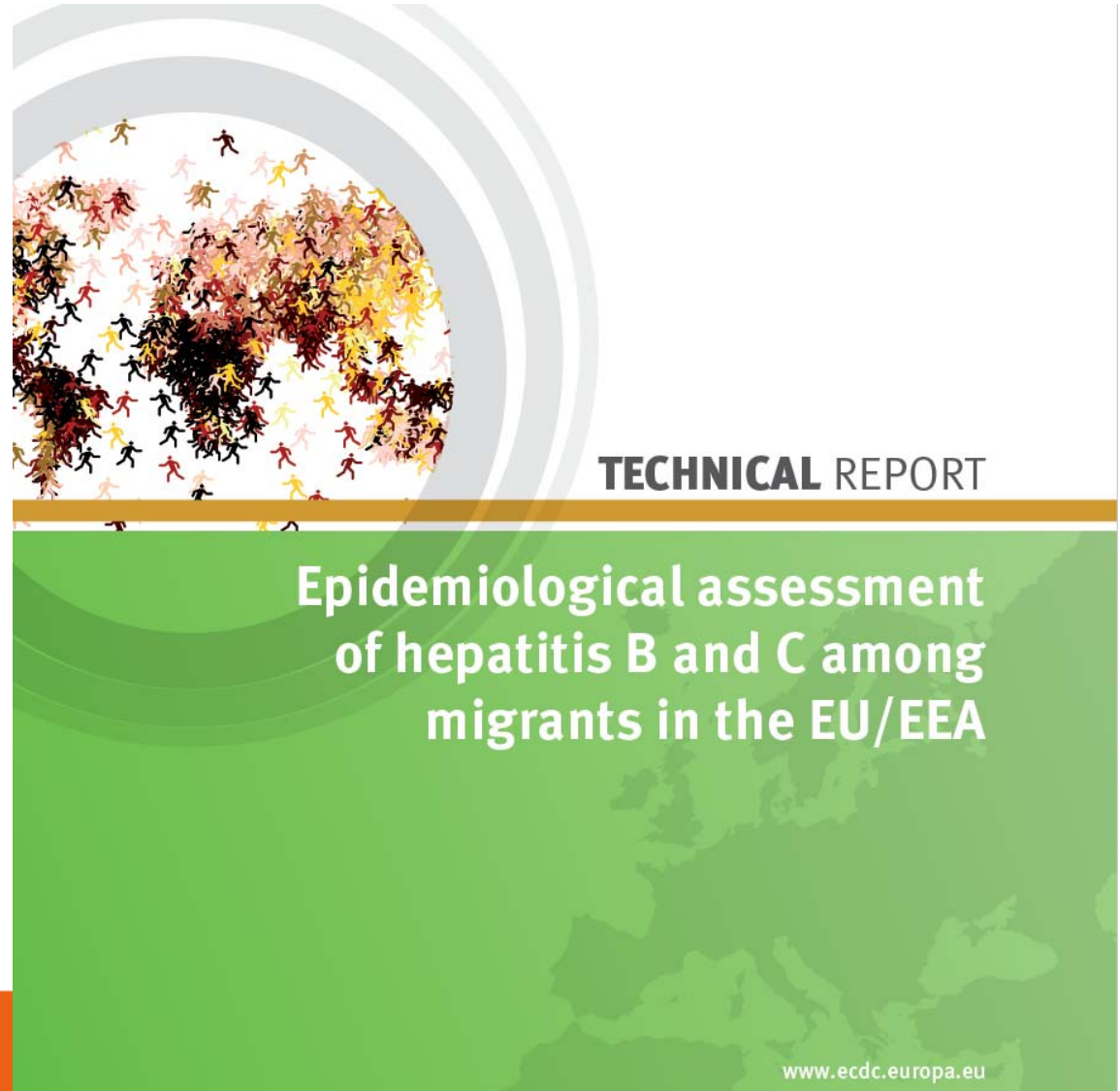
*Aantal gedetineerden die verblijven in de Belgische gevangenissen:

<http://statbel.fgov.be/nl/statistieken/cijfers/bevolking/andere/gevangenen/>

**Mémoire Virginie Minguet (2010-2011)

***Pascal Bilaey, personal communication

Seroprevalence within high prevalence groups: migrants from endemic regions



TECHNICAL REPORT

**Epidemiological assessment
of hepatitis B and C among
migrants in the EU/EEA**

www.ecdc.europa.eu

HCV seroprevalence within high prevalence groups: migrants from endemic regions



- Based on migrant population in Belgium from endemic regions (seroprevalence >1%)
- Adults (>15+)
- Estimated 18.607 (9.729-32.764) cases.
- Considering 58.360 HCV infected in Belgium, 32 % have roots from foreign countries.

HCV seroprevalence within high prevalence groups: HIV co-infection



Hepatitis C als co-infectie bij HIV positieve MSM: incidentie en risico- factoren

Ludwig Apers
Avondseminarie 29/10/2015

HCV seroprevalence within high prevalence groups: HIV co-infection



- ITM study 2010-2014, 11.641 HIV patients
- 5.556 MSM patients (47,7%)
- 87 (1,6%) HCV infected

HCV seroprevalence within high prevalence groups: babyboom generation



UZGent study for 1106 patients admitted at the emergency department

Date of birth	N	Prevalence
<1945	236 (21,3)	2,02%
1945-1965	376 (34%)	1,6%
>1965	494 (44,7%)	1,12%
Total	1106	1,9%

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Acta GE Belgica 80, A11, 2017

HCV seroprevalence within high prevalence groups: Healthcare workers



Volume 21, Issue 3 March 2000 , pp. 209-212

Prevalence of Hepatitis C Antibodies in a Large Sample of Belgian Healthcare Workers

Guido Moens ^{(a1) (a2)}, Robert Vranckx ^(a3), Liesbeth De Greef ^(a1) and Pierre Jacques ^{(a1) (a2)} 

- Prevalence study in 22 hospitals in Flanders and BXL
- Study period 1996-1997
- Prevalence 0,41%

HCV seroprevalence within high prevalence groups: nosocomial infections

Hepatitis C virus in a hemodialysis unit: Molecular evidence for nosocomial transmission

LIEVEN STUYVER, HENDRIK CLAEYS, ANN WYSEUR, WOUTER VAN ARNHEM, HANS DE BEENHOUWER, STIJN UYTENDAELE, JAN BECKERS, DIRK MATTHIJS, GEERT LEROUX-ROELS, GEERT MAERTENS, and MARC DE PAEPE

Innogenetics, Gent; Blood Transfusion Centre Leuven, Leuven; St. Blasius Algemeen Ziekenhuis, Dendermonde; Laboratory of Clinical Chemistry, University of Gent, Gent, Belgium

- Only one study described
- ECDC request to report nosocomial infections
- In Belgium no mandatory notification for hepatitis nosocomial infections

Conclusion

- Although screenings are performed within the general population and high prevalence groups, no screening policy is available.
- Epidemiological data are available for general population and high prevalence groups
- Epidemiological data are fractionated and missing a strategic plan.
- The implementation of a HCV register should improve the epidemiologic trend analysis