

Characteristics of undiagnosed HBV or HCV chronically infected population in France: a need for reconsidering testing

C. Brouard, J. Pillonel, Y. Le Strat, M. Jauffret-Roustide, F. Lot, C. Larsen, C. Semaille

French Institute for Public Health Surveillance (InVS), Department of Infectious Diseases, Saint-Maurice, France

EASL, London, April 2014



Nothing to disclose



Background of HCV and HBV screening

- Treatment advances
- Efficient screening tests, including rapid and point of care screening tests for hard to reach populations
- ➔ **Effective HCV and HBV screening is essential**
 - Individual benefit
 - Collective benefit
- Expanded HCV screening recommendations
 - United States: one-time HCV testing for persons born in 1945-1965
 - Canada: one-time HCV testing for persons born in 1945-1975



What about HCV and HBV screening in France?

- Low endemic country (< 1%)
 - Currently, French policy: risk-based screening
 - ➔ Not sufficient !
 - An additional population-based testing?
 - ➔ Which gender?
 - ➔ Which age group?
- ➔ Data on HCV and HBV undiagnosed population are needed**



Aims

- To estimate undiagnosed HBV and HCV chronically infected population proportion, number and characteristics in France
- ➔ To adapt both HBV and HCV screening strategies



Methods

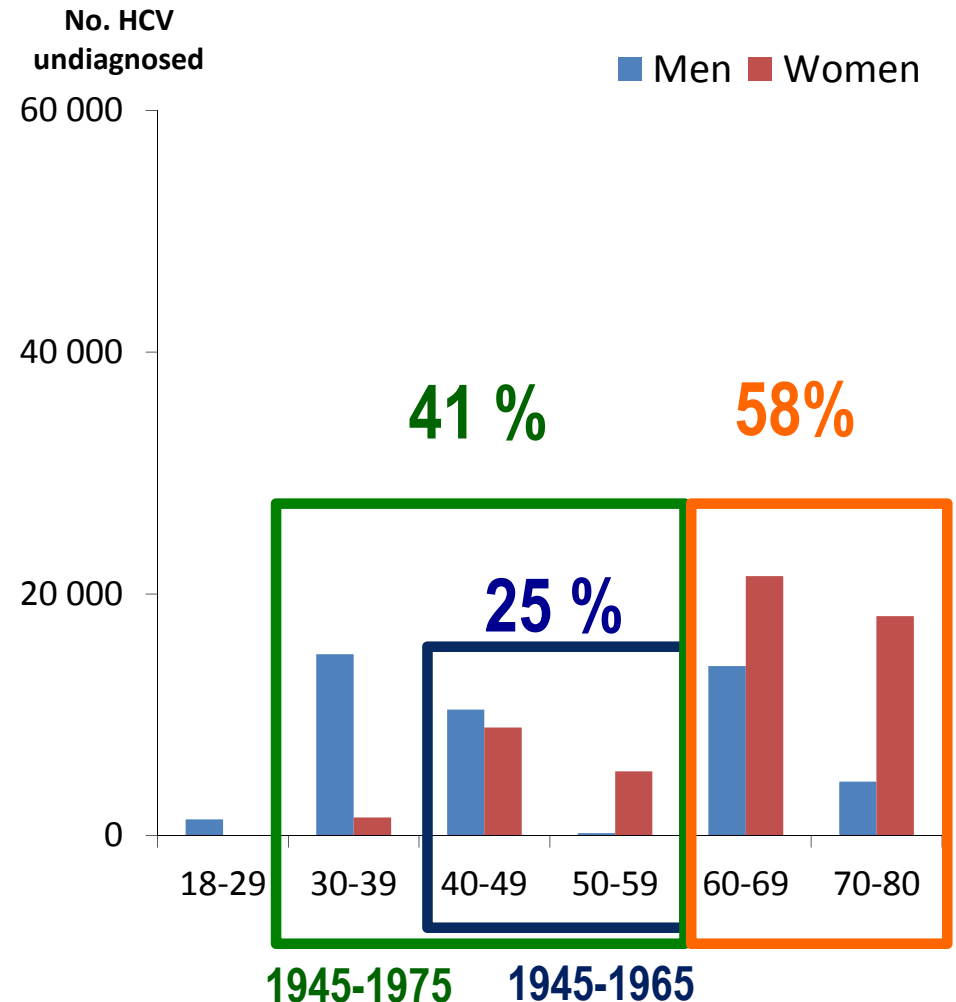
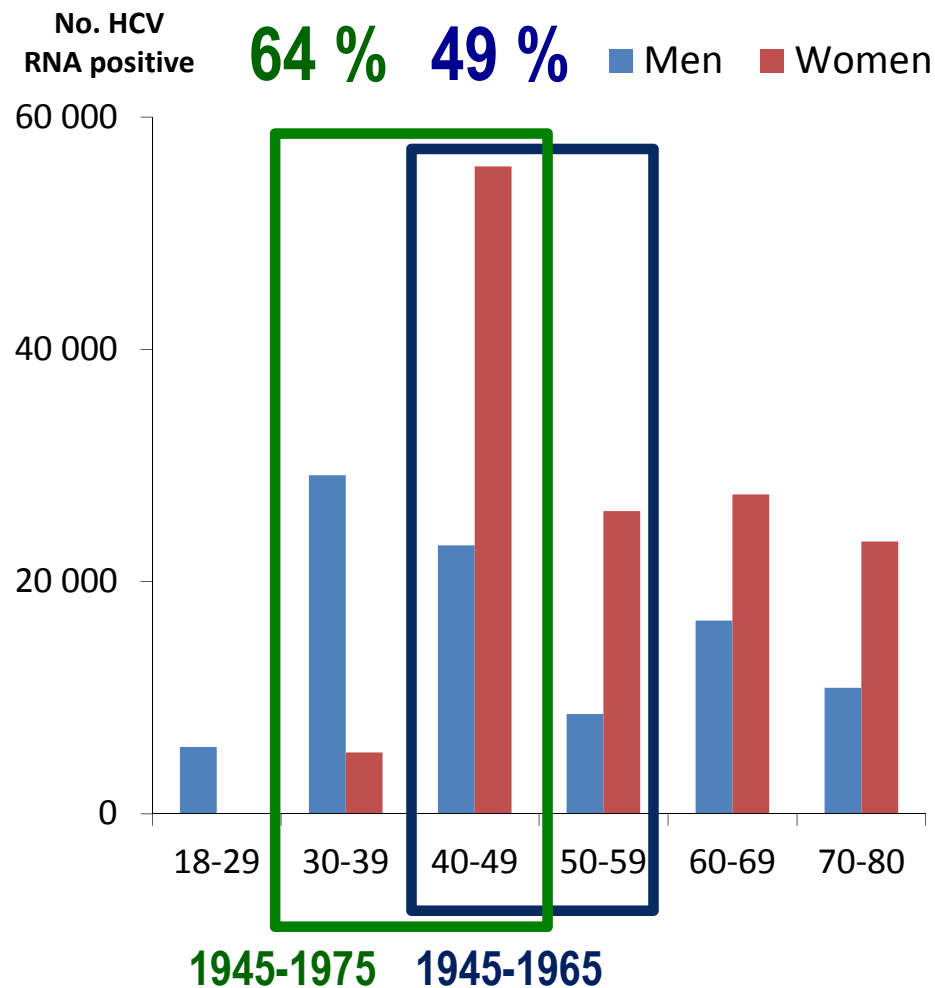
- National seroprevalence survey (2004)
 - random sample of \approx 15,000 adults between 18 and 80 year-olds
 - serum samples: HCV RNA and HBsAg
 - data
 - socio-demographic characteristics
 - risk factors
 - awareness of HBV/HCV infection
- We focus on **undiagnosed chronically** infected
 - = persons HCV RNA (+) or HBsAg (+) unaware of their status



Why are data on undiagnosed population important?

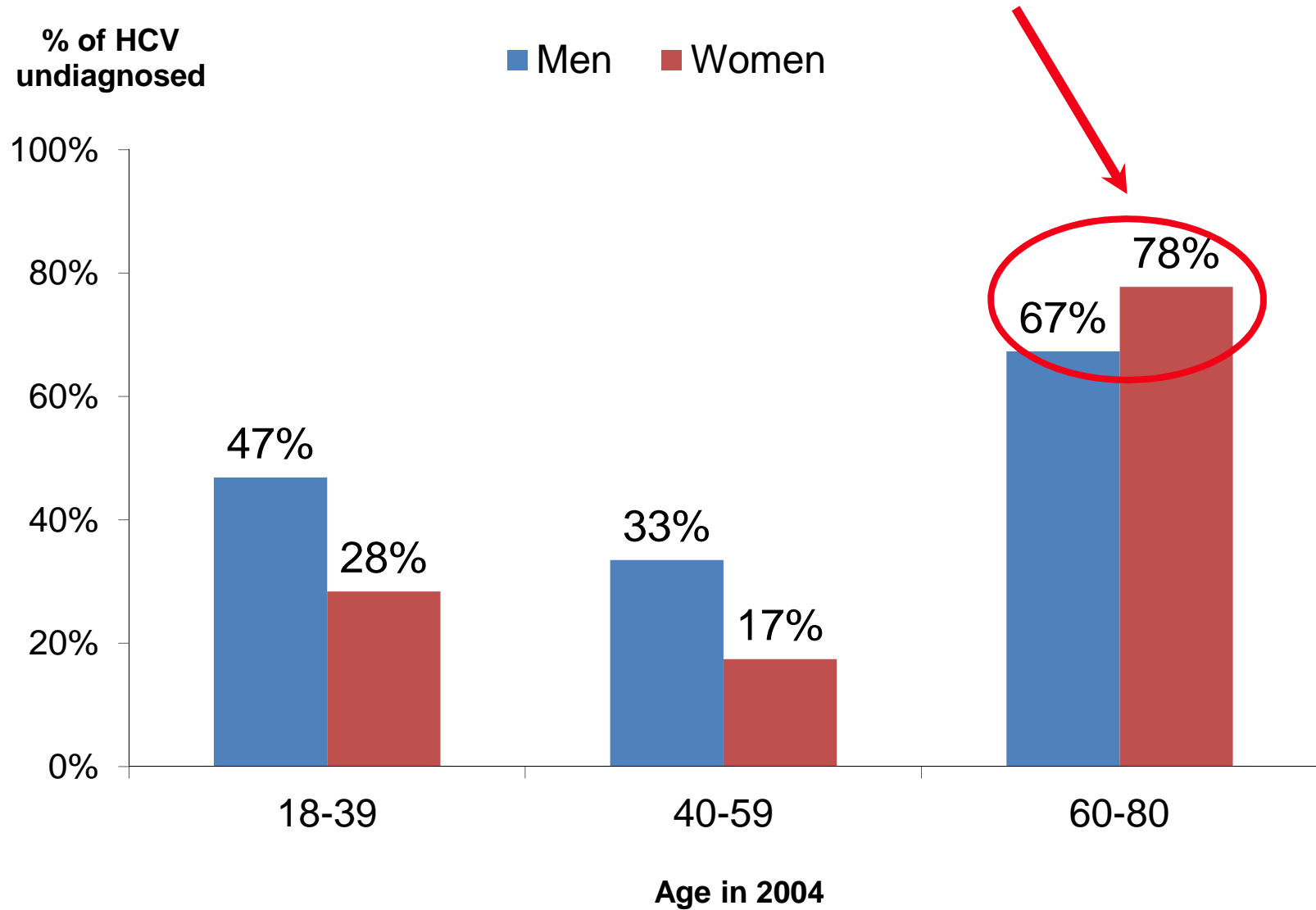
HCV chronic population

HCV chronic **undiagnosed**





Proportion of HCV undiagnosed depends on age

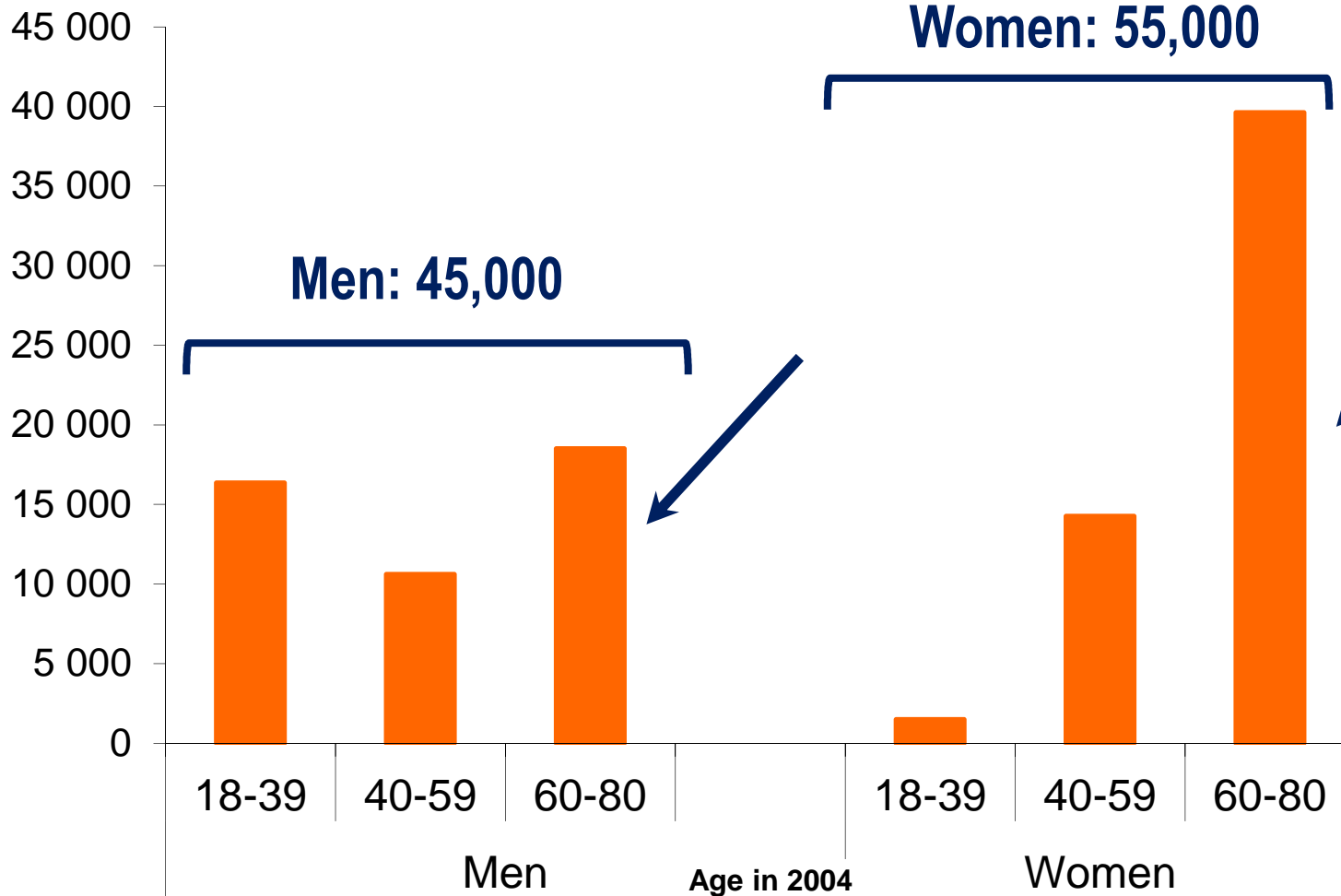




Who is the HCV undiagnosed population?

100,000 of 230,000 HCV infected population (**43%**) are undiagnosed in 2004

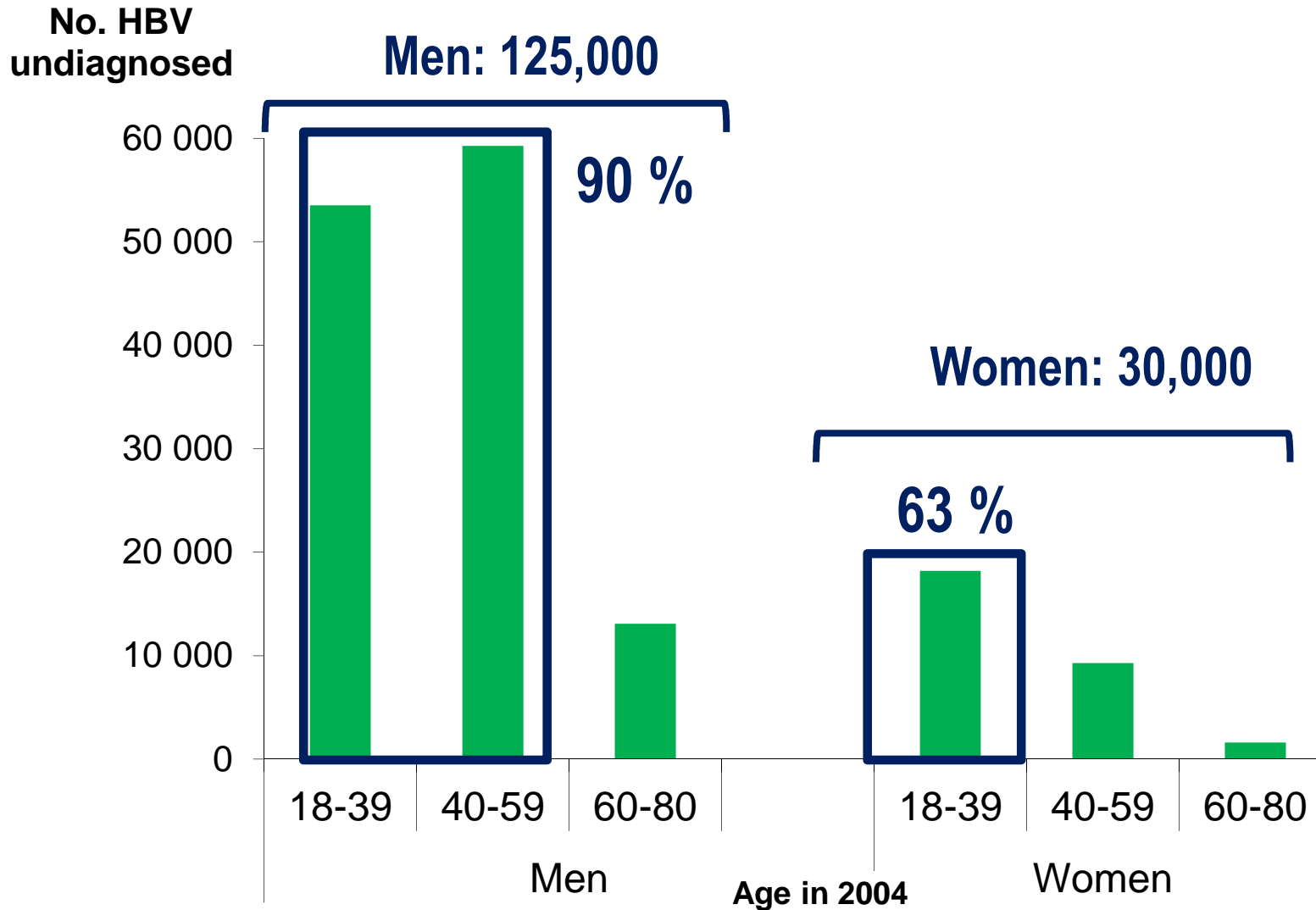
No. HCV undiagnosed





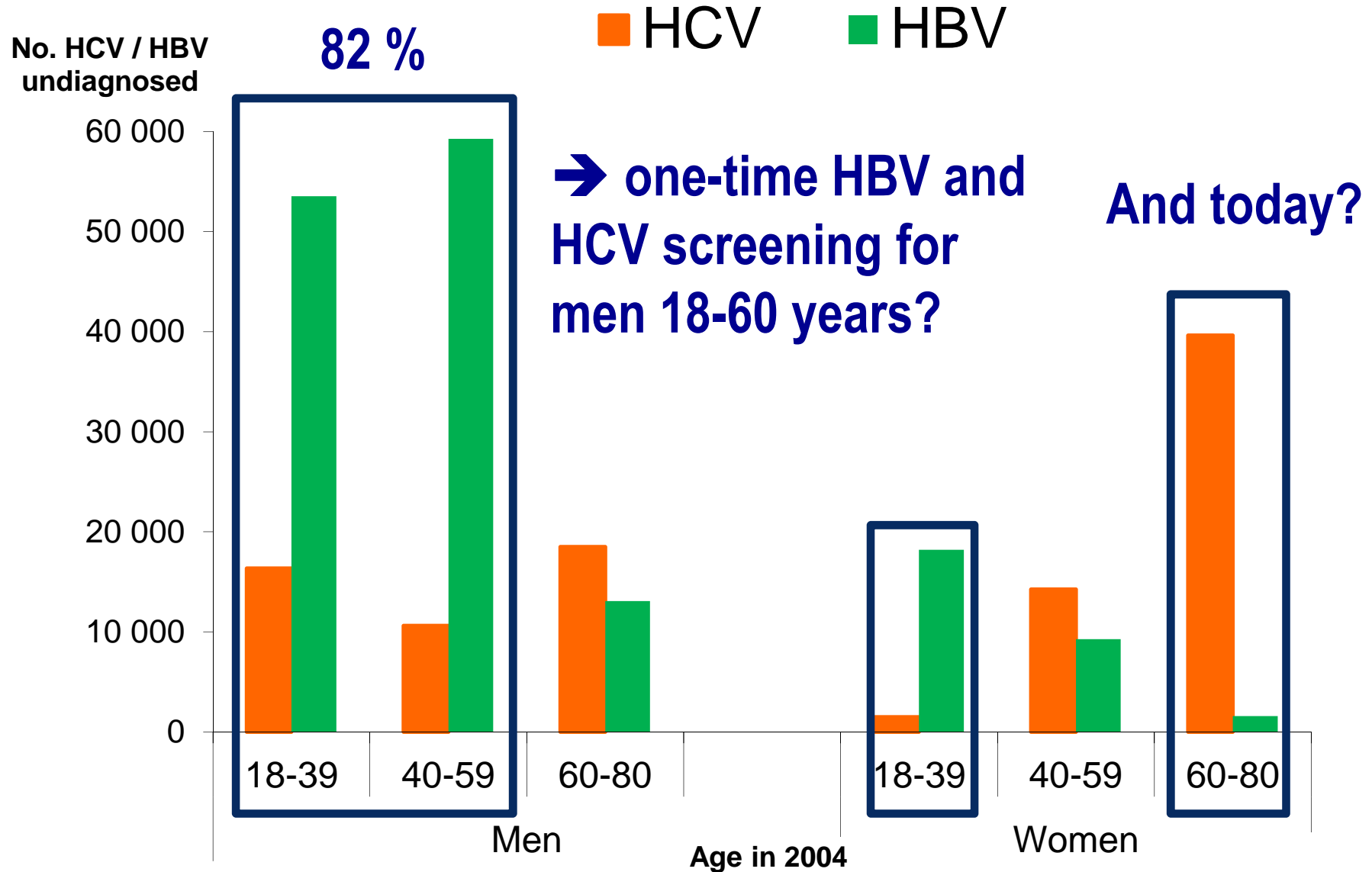
Who is the HBV undiagnosed population?

155,000 of 280,000 HBV infected population (**55%**) are undiagnosed in 2004



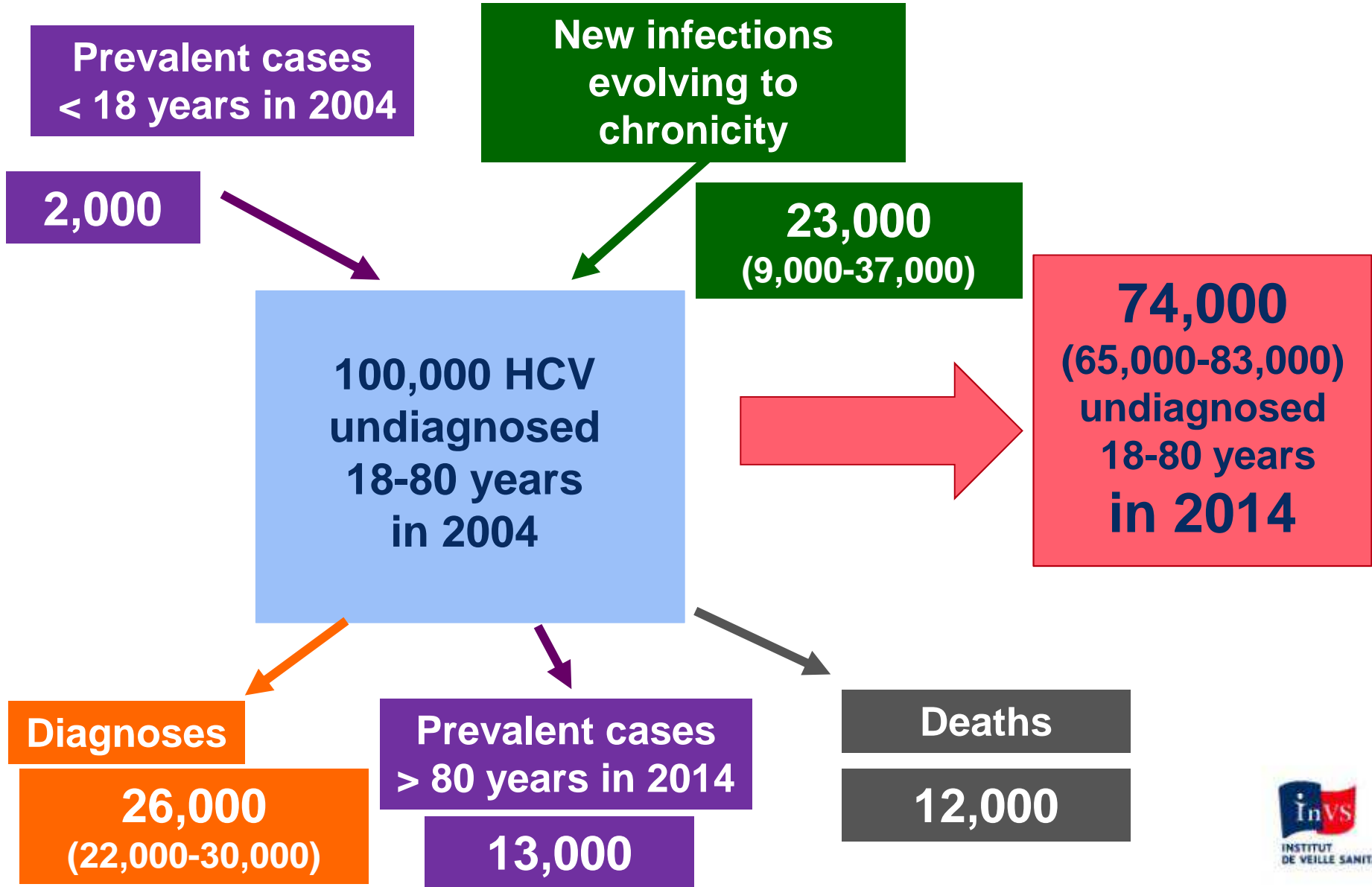


Is a combined strategy for HBV and HCV relevant?





How many undiagnosed HCV cases in 2014 ?



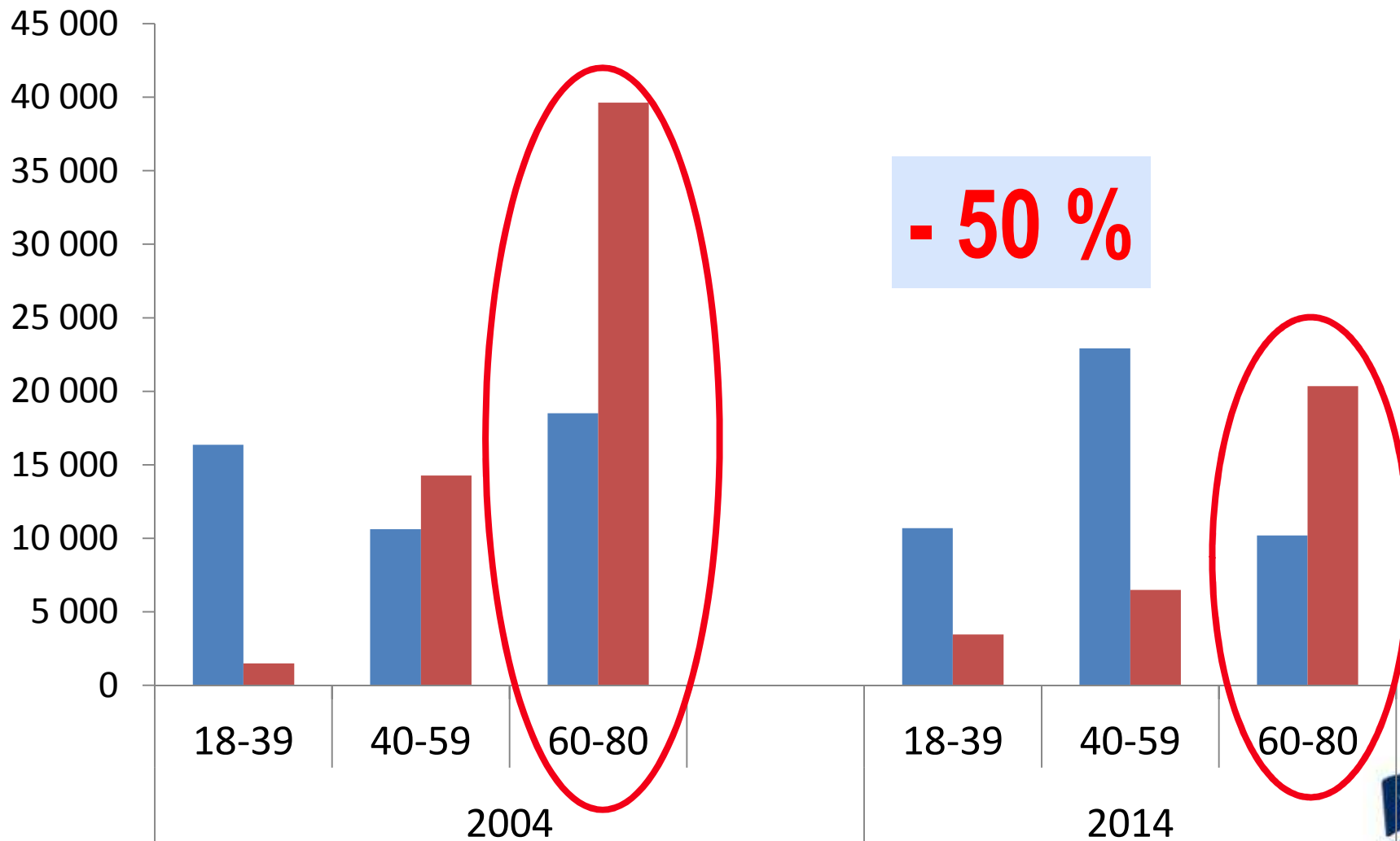


Who is the undiagnosed HCV population in 2014 ?

No HCV undiagnosed

■ Men

■ Women



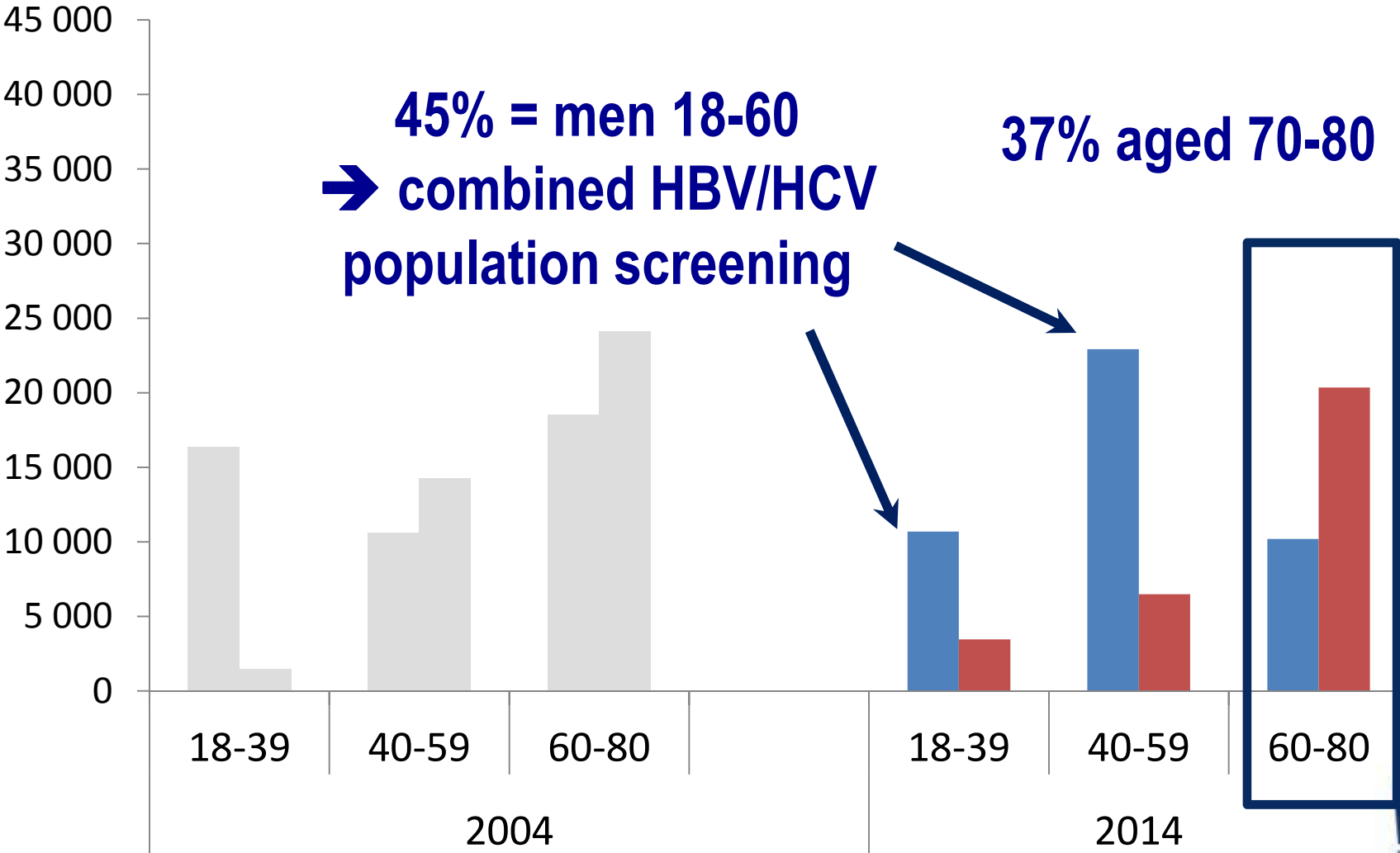
- 50 %



Who is the undiagnosed HCV population in 2014 ?

No HCV undiagnosed

■ Men ■ Women



45% = men 18-60
→ combined HBV/HCV
population screening

37% aged 70-80



Discussion

- Limitations
 - Prevalence survey
 - 2014 update
 - HCV: first results based on several assumptions
 - HBV: more difficult (vaccination and migratory data)
- Advantages
 - National survey performed on a large and random sample
 - HBV and HCV **chronic** infections
 - Awareness of infection



Perspectives

- French report for management of persons chronically infected with HCV and HBV (May 2014) → possible recommendations
- Cost-effectiveness of a population-based screening in a low-prevalence setting?
 - Taking into account feasibility
- To expand access to treatment



Acknowledgements

National hepatitis B and C prevalence survey (general population)

C. Meffre *et al.*, participating primary health insurance units, social security medical centers, National Reference Centre for Viral Hepatitis and participants

Hepatitis C prevalence among drug users, ANRS-Coquelicot

M. Jauffret-Roustide *et al.*, L. Weill-Barillet, X. Pascal

Blood donors surveillance

J. Pillonel, S. Laperche, P. Gallian *et al.*, INTS, EFS

Hepatitis C surveillance through hepatology reference centres

E. Delarocque-Astagneau *et al.*