HEPATITIS A OUTBREAK: EPIDEMIOLOGY AND MANAGEMENT

Flemish Agency Care and Health

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AGENTSCHAP ZORG & GEZONDHEID

Vlaanderen is zorg

CONTENT

- Notifiable infectious diseases in Belgium

- Hepatitis A outbreak:
  - Epidemiology
  - Outbreak management
  - Barriers and issues
  - Recommendations

NOTIFIABLE INFECTIOUS DISEASES

- List of notifiable infectious diseases in 3 Belgian regions/communities
  - determined by Ministerial Decree

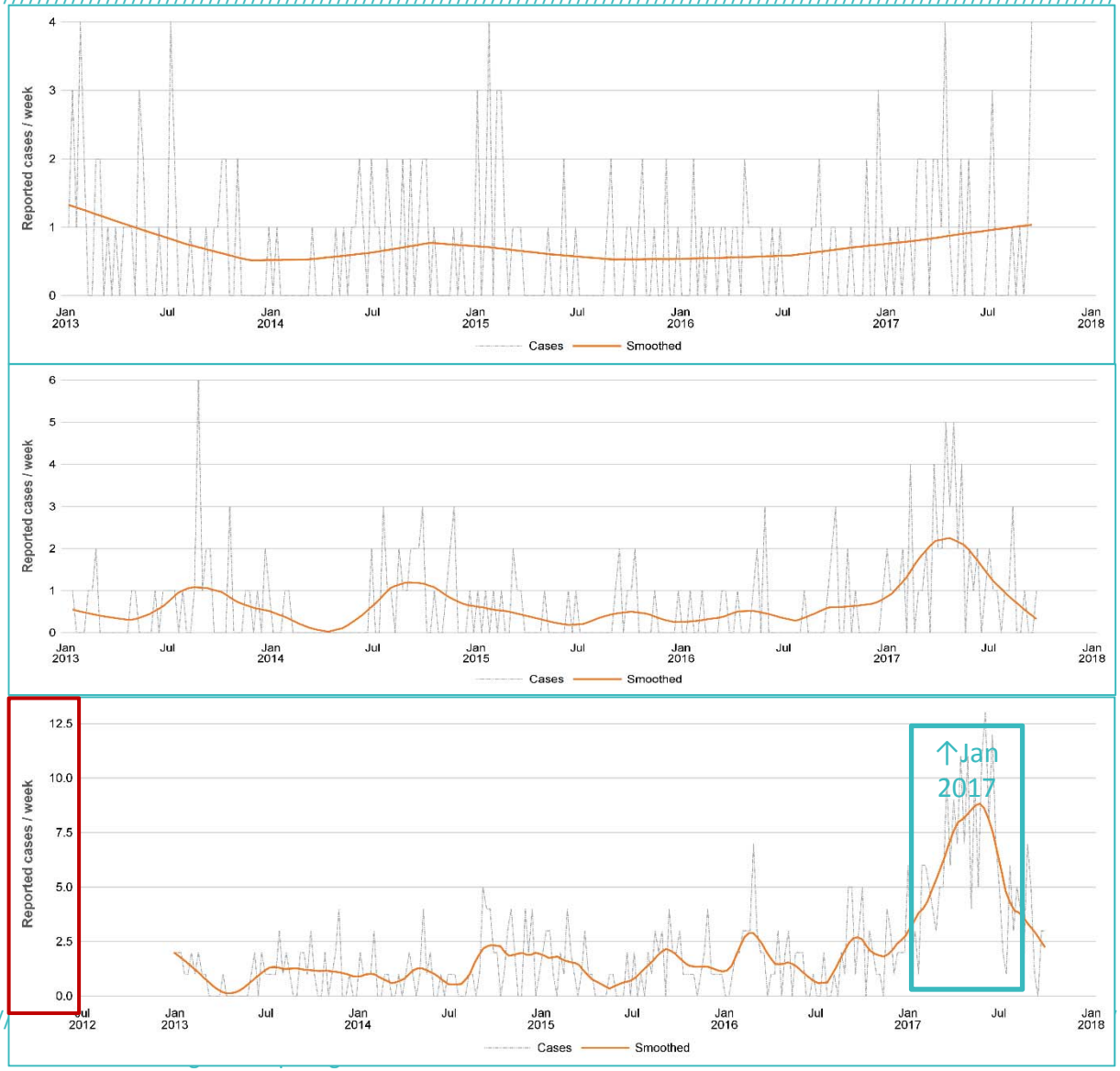
- Hep A included in list 3 regions/communities
  - Case definition:
    - Probable case: clinical criteria and epidemiological criteria
    - Confirmed case: clinical criteria and lab confirmation (serology or PCR)

- Reason for notification:
  - General:
    - Case and outbreak management → appropriate actions to prevent transmission or to control / stop outbreak
    - Surveillance: adjust policies (e.g. vaccination scheme)
  - Specific for Hep A:
    - Prompt notification is important to start actions and avoid transmission to others:
      - Vaccination of close contacts (≤ 2 weeks, including household, sexual contact)
      - Hygienic measures
      - Exclusion work/school (1 week after onset jaundice/T°)

EPIDEMIOLOGY

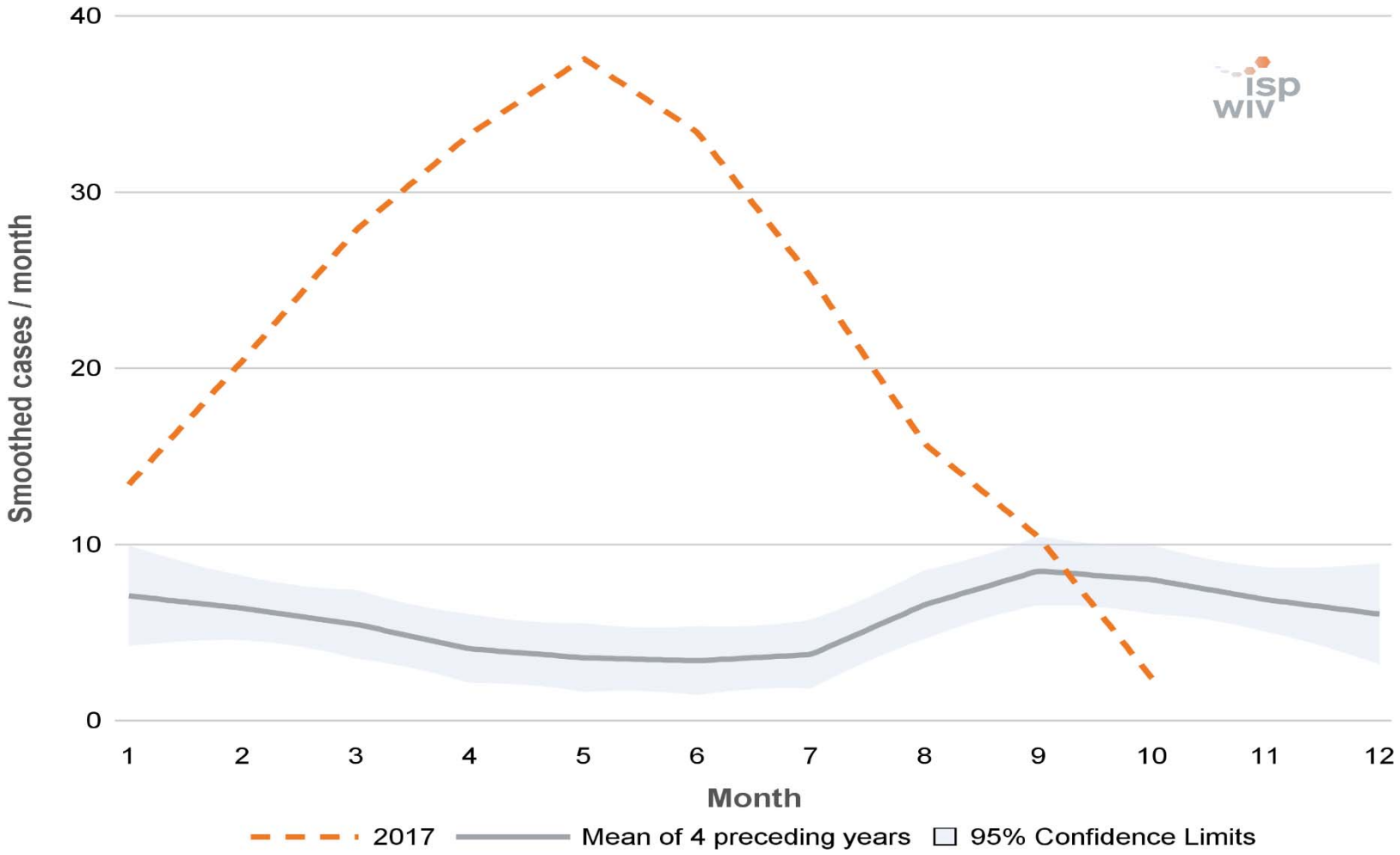
EPIDEMIOLOGY 2013-17: ABSOLUTE NUMBERS

- Walloon region
- Brussels region
- Flanders



Source: Epilab, Epistat – WIV-ISP, accessed 23 October 2017

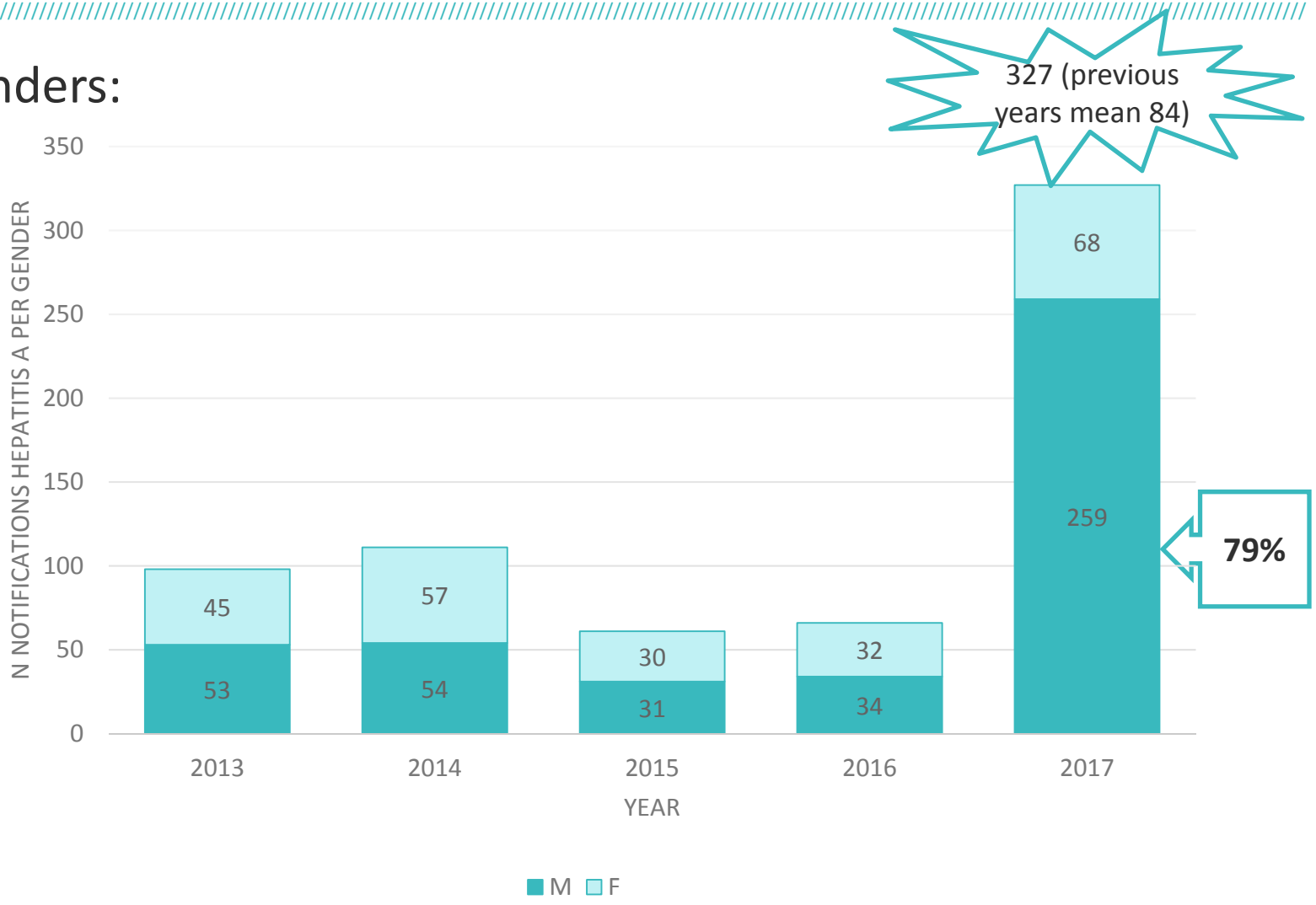
EPIDEMIOLOGY: FLANDERS



Source: Epilab, Epistat – WIV-ISP, accessed 23 October 2017

EPIDEMIOLOGY 2013-17: GENDER DISTRIBUTION

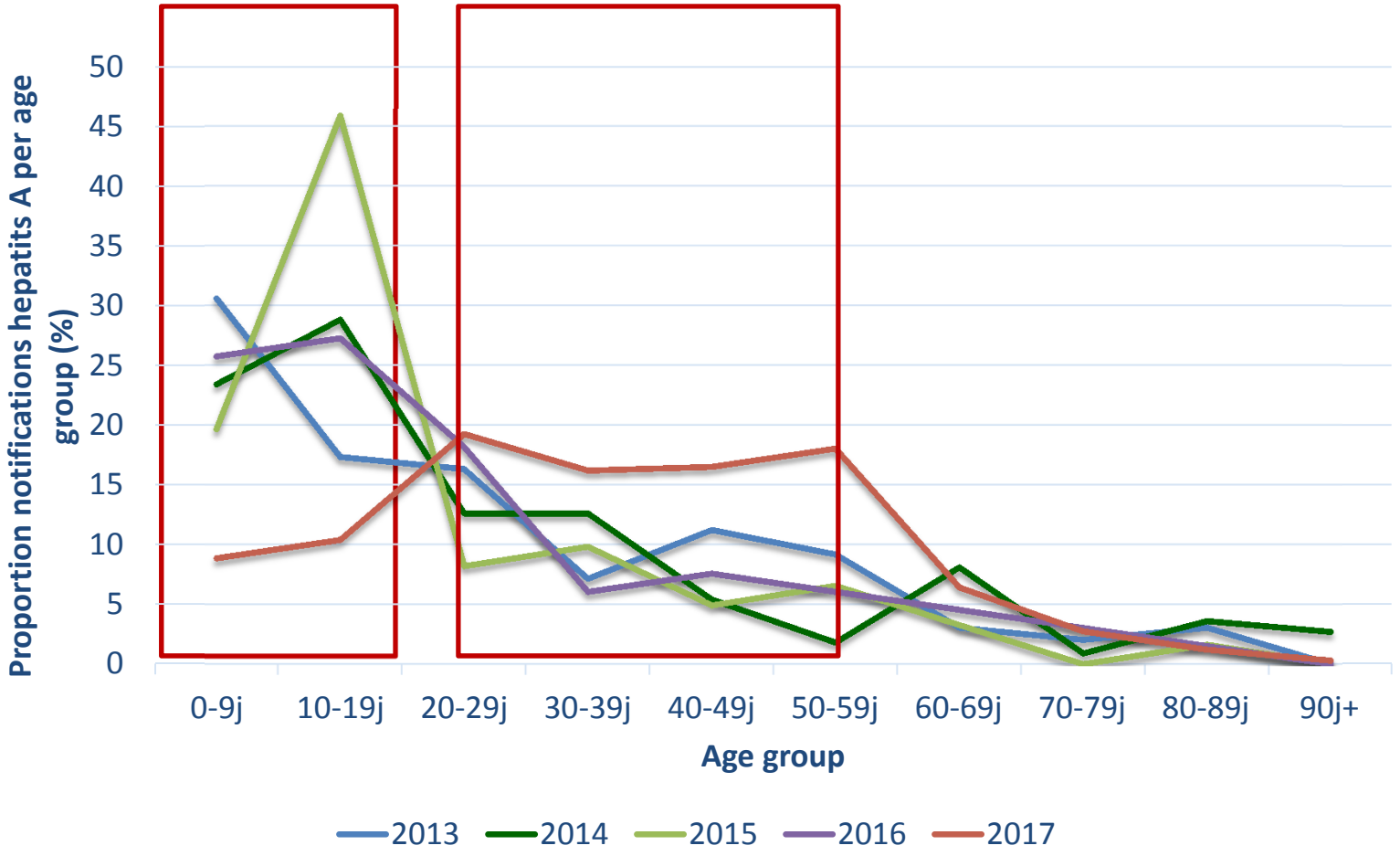
> Flanders:



Source: Agentschap Zorg & Gezondheid

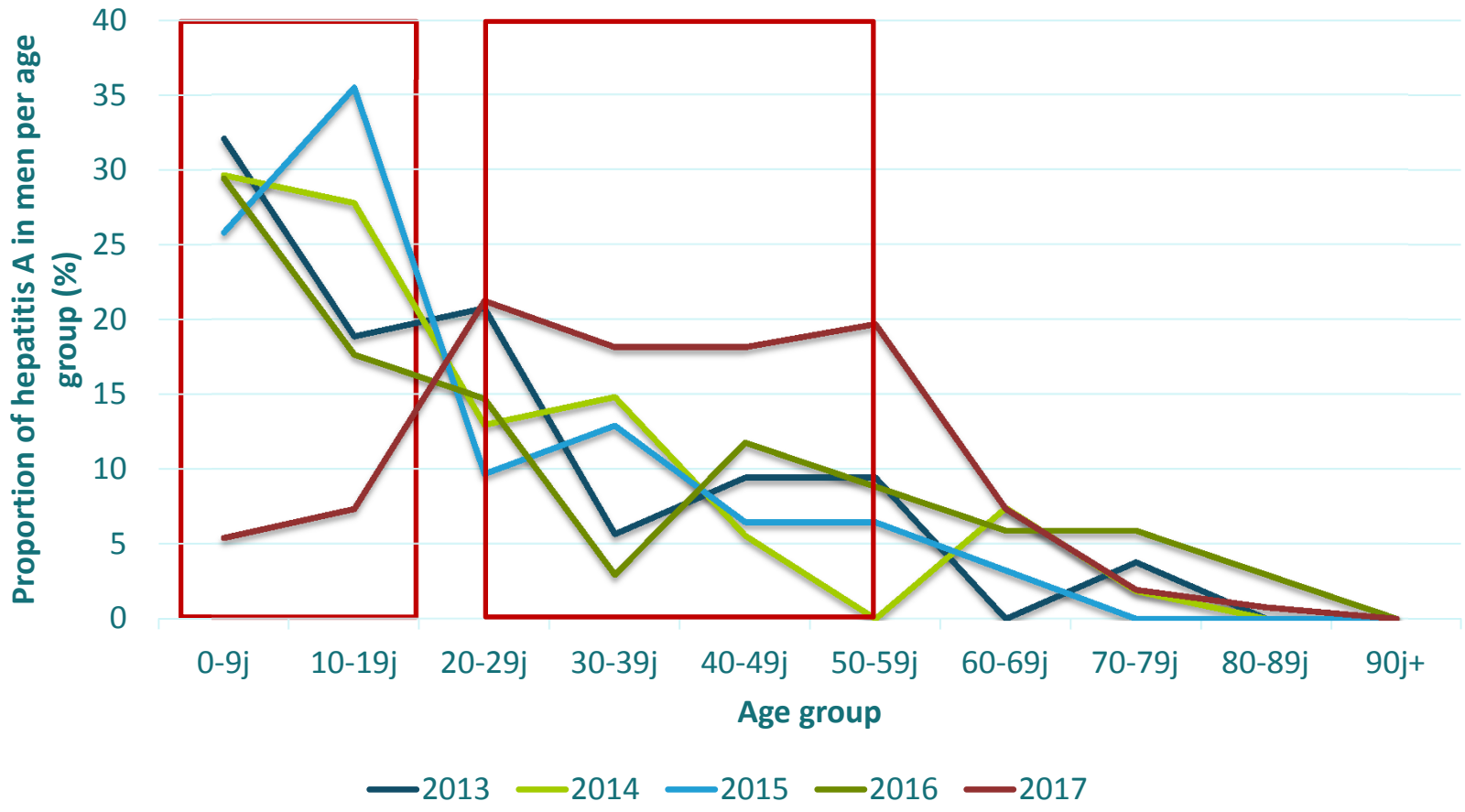
EPIDEMIOLOGY 2013-17: AGE DISTRIBUTION

> Flanders:

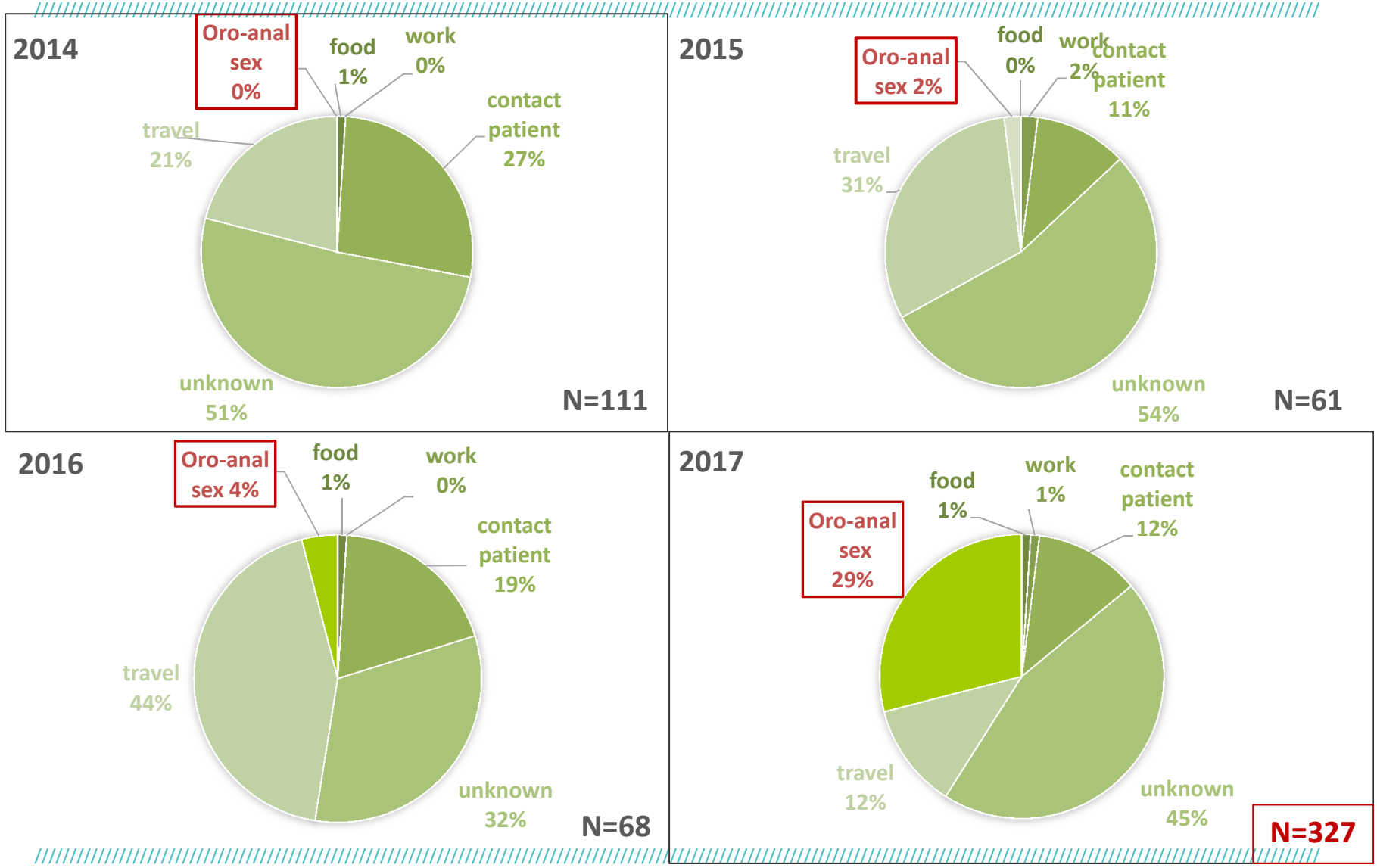


EPIDEMIOLOGY 2013-17: AGE DISTRIBUTION IN MEN

> Flanders: men



EPIDEMIOLOGY 2013-17: FLANDERS, PER SOURCE

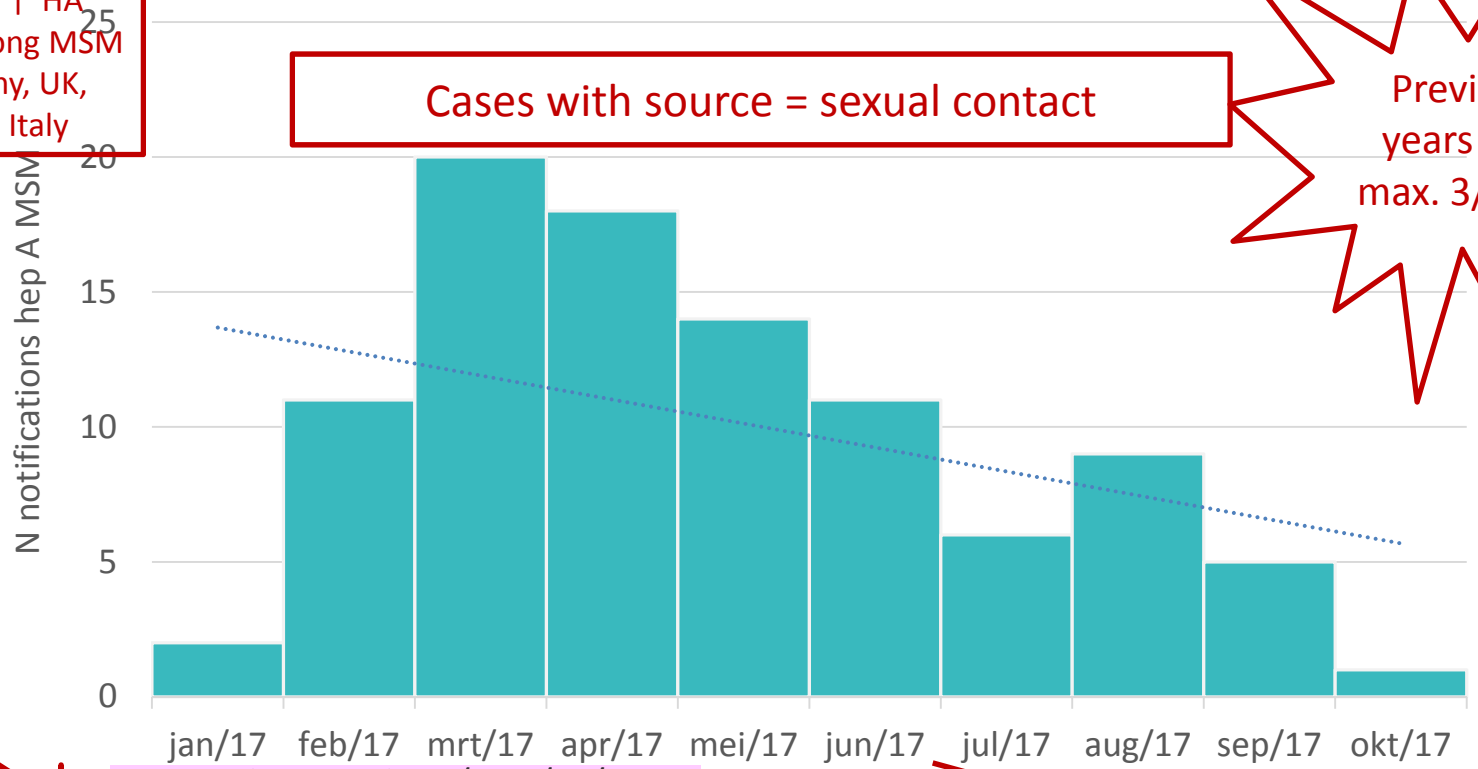


EPIDEMIOLOGY: FLANDERS - MSM

EWRS: Oct/16-Jan/17 ↑ HA cases among MSM Germany, UK, Spain, Italy

Cases with source = sexual contact

Previous years : 0 - max. 3/ year



Gay Pride Brussels 29/4-17/05/2016
Gay Pride London 10-26/6/2016
Gay Pride Madrid 29/6-3/7/16
Gay Pride Amsterdam 23/7-7/8/16
Gay Pride Berlin 23/7 (nl. late June)

Gay pride Madrid 23/6-2/7/17

Gay pride Brussels 20/5/17

Source: Flemish Agency of Care and Health, 2017

OUTBREAK MANAGEMENT

ACTIONS TAKEN DURING OUTBREAK

- Case management:
  - Food handlers → advice Federal Agency for Safety of Food Chain

- Sequencing :
  - From June 2016 onwards: hepatitis A outbreak in 17 EU/EEA countries, mainly among MSM → 3 co-circulating strains:
    - VRD_512_2016 (UK), V16-25801 (Germany), RIVM-HAV 16-090 (The Netherlands);
    - UK strain = 1st reported and most prevalent in (southern) Europe
  - N samples to NRC for genotyping: 61 Flanders, 4 Brussels, 1 Wallonia
    - **58% RIVM-HAV 16-090;**
    - 33% UK strain [VRD_512_2016];
    - 2% Munich-Frankfurt-Berlin strain [V16-25801];
    - 8% genotype (I B)
  - Stop sequencing around April 2017, except if source unknown ánd male
  - Sequencing also confirmed transmission to broader population

ACTION TAKEN DURING OUTBREAK (2)

> Sensibilization

- Health professionals: letter to GP/vaccinators, updates via newsletter
  https://www.zorg-en-gezondheid.be/nieuwsflash-infectieziekten

- MSM: information, focus on sensibilization for hepatitis A vaccination (SENSOA, Ex Aequo, Arc en ciel Wallonie – before gay pride Brussels May 20th 2017)

http://holebi.info/phpnews/kortnews.php?action=fullnews&id=15993
http://zizo-online.be/article/11508

- Press release http://www.standaard.be/cnt/dmf20170804_03002448

ACTION TAKEN DURING OUTBREAK (3)

> International

- February 2017
  - Epidemic Intelligence Information System (EPIS - ECDC, via WIV): data sharing of samples with sequencing
  - Rapid Risk Assessment (ECDC): Belgium included
  - Early Warning Response System (ECDC)

- April 2017:
  - EPIET project: participation to descriptive part
  - Publication (ECDC, draft August 2017)

ISSUES AND BARRIERS

- Specific groups: difficult to reach!
- Source : taboo around sexual behavior!, privacy sphere!
- Logistics around case management (vaccine/ limited availibility in Belgium of single dose hepatitis A for adult)
- Outreach vaccination on specific events: lack of capacity / budget (no specific vaccination programme focussing on MSM)

RECOMMENDATIONS

RECOMMENDATIONS

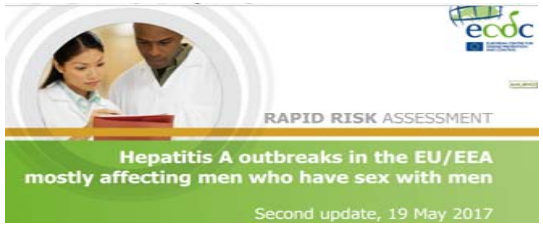
> General:

- Report 2008: study of effectiveness and cost effectiveness of possible vaccination strategies in Belgium for hepatitis A, based on the available epidemiological data.
- Belgium: not endemic for hepatitis A
- Recommendation: “Public funding for hepatitis A vaccination is recommended for children 1-12 y who travel to high-endemic countries”

RECOMMENDATIONS

> May 2017: Recommendations ECDC

- Where hepatitis A vaccination is not universally offered to MSM, the following groups could be prioritized for vaccination:
  - MSM living in areas of ongoing outbreaks
  - MSM travelling to destinations reporting outbreaks of hepatitis A among MSM
  - MSM that will attend WorldPride festival in Madrid, 23 June–2 July 2017 and are likely to engage in risky sexual practice
  - MSM at risk of severe outcomes from hepatitis A, for example those with hepatitis B and/or hepatitis C and those who inject drugs.



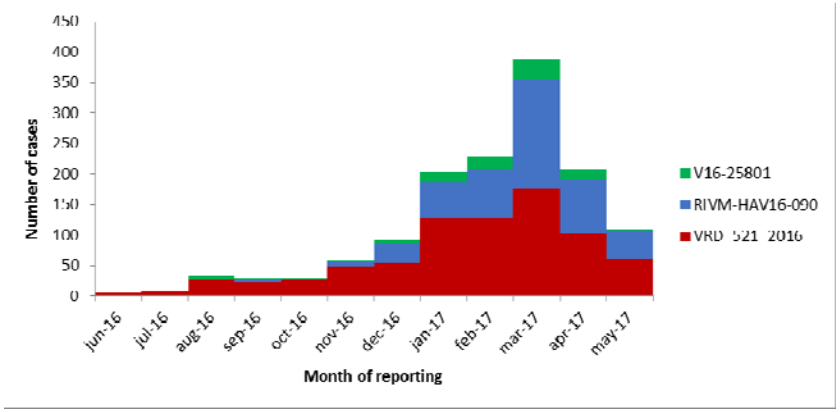
> Most effective preventive measure to avoid future outbreaks in MSM population:

- Vaccination MSM (Advice Belgian High Health Council, 2013)
- Raising awareness of preventive measures through information campaigns targeting MSM

QUESTIONS?

EPIET STUDY

Confirmed hepatitis A cases by strain and date of reporting (n=1400), 1 June 2016 – 31 May 2017, participating EU/EEA countries



Confirmed hepatitis A cases by strain and geographical distribution (n=1400), 1 June 2016 – 31 May 2017, participating EU/EEA countries