



Control and prevention of infectious diseases in prison and among drug users: the path to HCV elimination in Luxembourg

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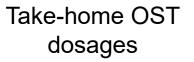




Harm reduction services in Luxembourg

- ✓ 822 PWID in 2022 (prevalence rate of 1.93 per 1,000 inhabitants aged 15 to 64 years)
- ✓ 2 supervised drug consumption facilities (2005 ABRIGADO Luxembourg city, 2015 Contact Esch Sud)
- Specialised harm reduction services and low-threshold agencies, hospital based drug treatment units, outpatient and an inpatient treatment facilities for OST programmes





Harm reduction services at the window and in mobile unit (Xchange)



Drop-In and "Pass By" services for sex workers







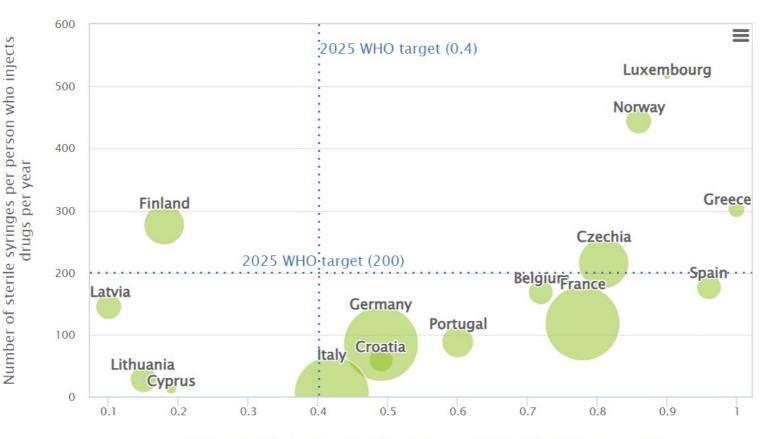
2 586 km² 625 978 inhabitants 47% foreigners 212 229 crossborder workers



Prevention among People Who inject Drugs

WHO target :

- at least 200 syringes distributed per PWID per year
- at least 40% of opioid dependent PWID receive opioid substitution therapy (OST)

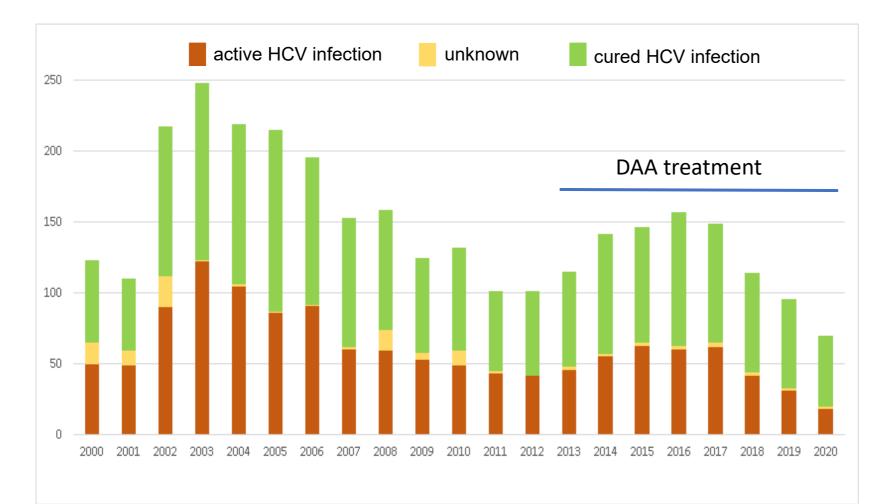


Proportion of high-risk opioid users receiving opioid agonist treatment

Source: EMCDDA. The elimination barometer for viral hepatitis among PWID in Europe, 2024 [https://www.emcdda.europa.eu/publications/html/viral-hepatitis-elimination-barometer_en].



Evidence for decreased HCV RNA at the main public hospital



1 510 DAA treatments provided between 2014-2023:

- 178 in prison
- 116 were provided to drug users through an outreach program

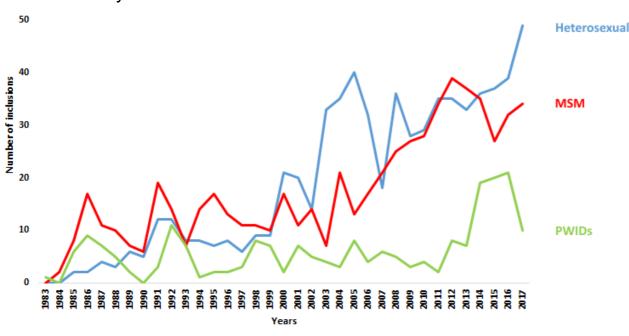
<u>Main public hospital</u>: coverage of 75% of DAA treatments in Luxembourg (general population, PWID, prison)



The HCV-UD outreach program

Hepatitis C new models of care for drug treatment services EMCDDA 2019

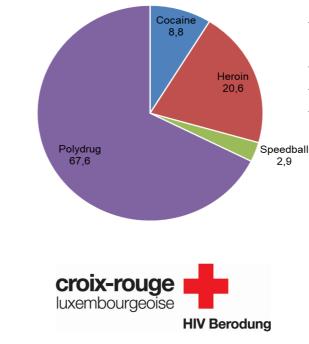
⁶⁰ 480 PWID registered between October 2015 and January 2020 at 4 harm reduction sites



HIV outbreak driven by cocaine injection (Arendt V et al, Plos one 2019)

Intravenous drug use (IVDU) in the last three months

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ABRIGADO

- ✓ HIV, HBV, HCV serologies and viral loads
- Fibroscan

jugend- an drogenhëllef

DEPARTMENT

OF INFECTION AND IMMUNITY

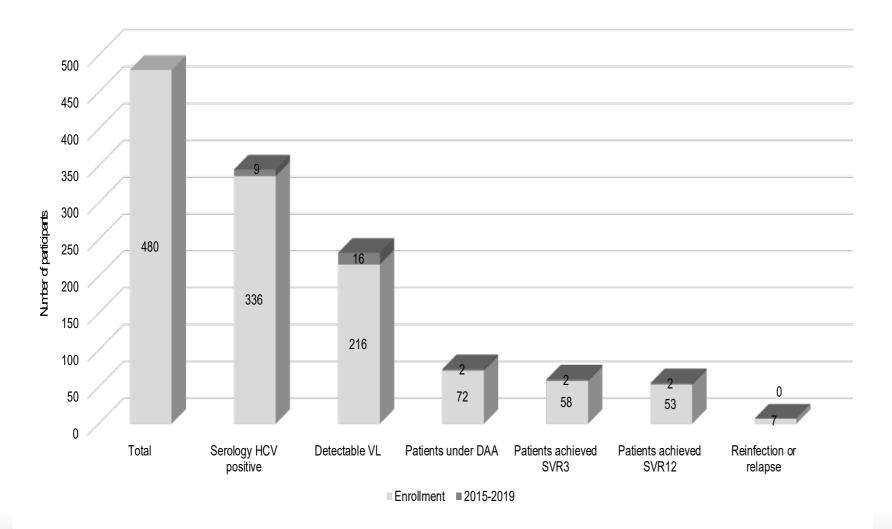
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- Link to care and DAA
- Questionnaire on drug use





HCV cascade of care (2015 - 2021)



71% (336) anti-HCV positive and 64% (216) of these were chronically infected (HCV RNA positive).

72 (33%) drug users had started DAA treatment at inclusion.

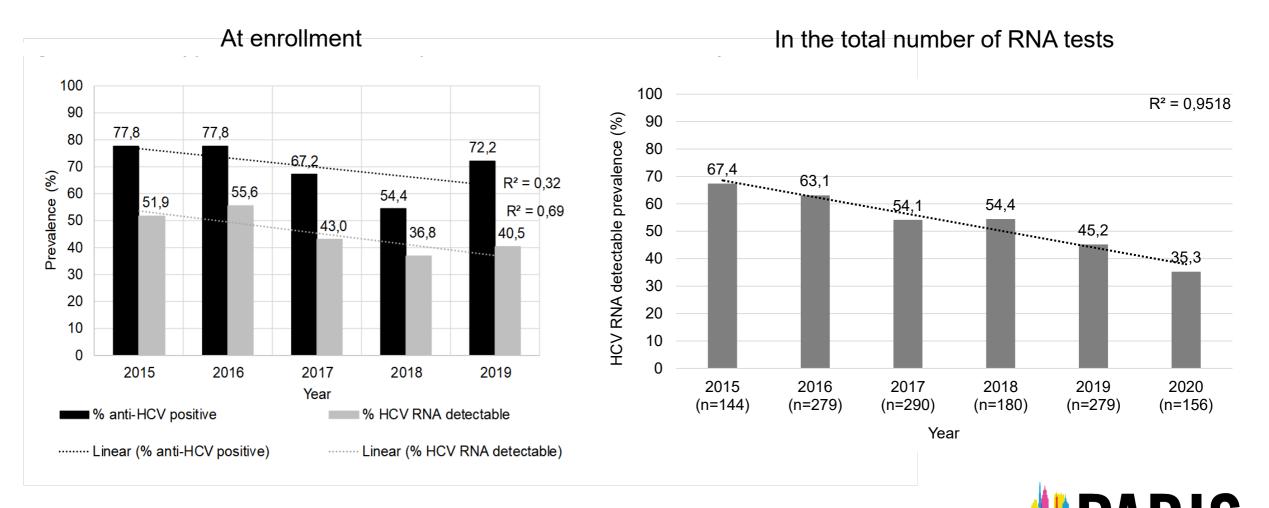
85% achieved SVR3, and 74% SVR12 (when maintained in the care system).

Reinfections recorded in 9.7% of cases by end of 2021 (2.5 reinfections/1000 patient-years of follow-up).



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Decreased IgG positivity and detectable HCV-RNA overtime



Outreach program: Test and treat the community



Test and treat the community using the GeneXpert HCV medical device at **various harm reduction sites**

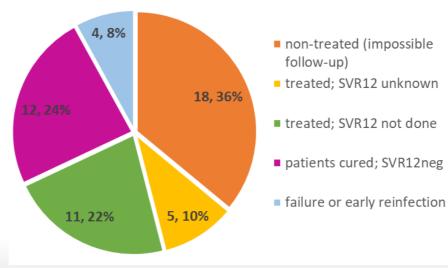




Flexible and drug delivery by nurses (DOT) from the drug treatment centers (with OST)

- Decentralise viral hepatitis services and offer appropriate care to key groups
- ✓ 'Test and Treat' rapid screening of HCV viral load using GeneXpert
- Access to DAAs on sites: Education, prevention of reinfection and peer support

50 patients detected with RNA-HVCpos. by GeneXpert 2022-2023





Peer support contingency management (not only navigator)



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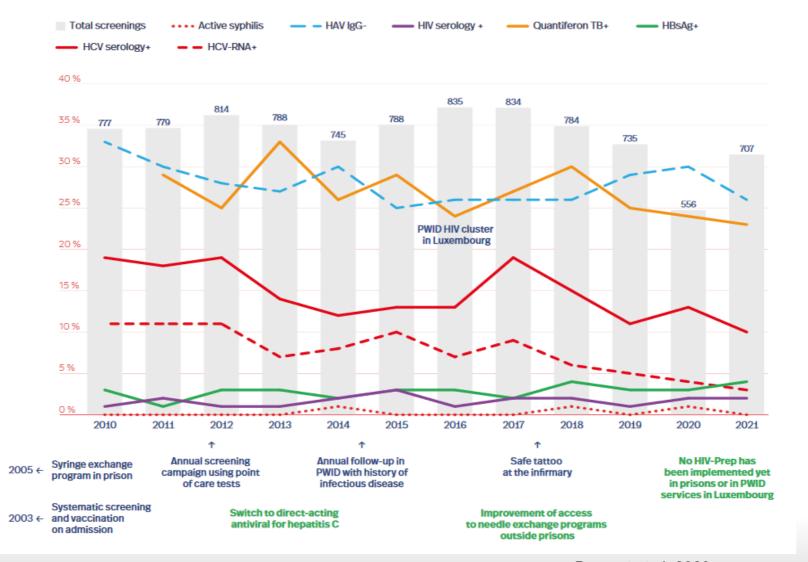
Prevention and Control of Infectious Diseases in prison

- Test:
 - every inmate has to be seen by a MD within 24 hours after entry in prison
 - Blood test proposal (HIV, HAV, HBV, HCV, Syphilis)
 - Chest X-Ray, ECG, Fibroscan, Ultrasound
- Treat:
 - ART and DAA
- Prevent:
 - OST
 - Vaccination program
 - Needle and syringe exchange program
 - Condom provision
 - Safe tattoo training
 - Working with NGOs to inform and educate prisoners and staff





Evidence of decreased HCV serology + and HCV-RNA +





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Braquet et al, 2023

Estimation of national chronic HCV prevalence in EU/EEA countries using multiparameter evidence synthesis

Thomadakis C, Nikolopoulos G et al EASL 2023, under revision, 2019 data

Multi-parameter evidence synthesis (MPES) is an approach that combines simultaneously direct or indirect information on different parameters or functions of parameters from diverse sources in order to derive an overall estimate of a certain medical condition

Profile of EU/EEA western-countries

Luxembourg : median prevalence of CHC 0.25 % (0.15 – 0.39) 1,243 persons (95% CrI: 760, 1,894) data 2019

Chronic hepatitis C (HCV) prevalence attributable to non-injection drug use : 26.91 (95% Crl: 11.54, 45.64) and to injection drug use : 73.09 (95% Crl: 54.36, 88.46)



Monitoring of CHC as evidence of HCV elimination among PWID



- \checkmark Coordination between the medical team, peers on site, and prison
- ✓ Non judgmental approach: care should be provided by MD and nurses from the drug treatment services (Infectious Diseases specialist)
- ✓ Problem of housing for initiation of DAA treatment
- ✓ Few indicators in active drug users (ongoing transmission in recent drug users)
- ✓ Medical doctors training to «recall» the inactive drug users for their own health
- \checkmark Real need to collect data to bring the evidence of hepatitis elimination among PWID



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PFLO



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National AIDS and Hepatitis Committee

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de l'Observatoire Européer

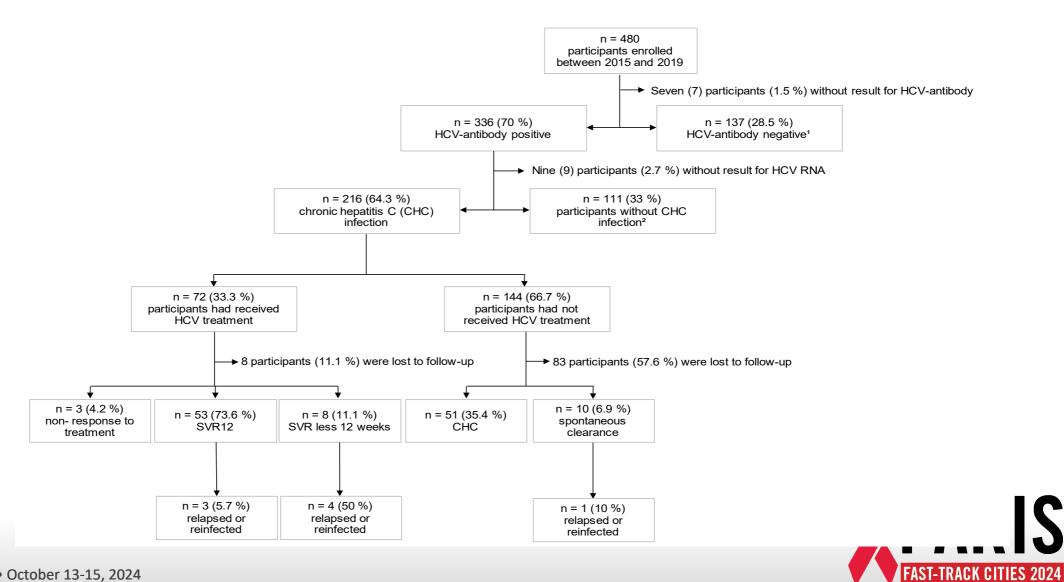
Thank you





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HCV-UD study workflow



Prevention and Control of Infectious Diseases in prison

HARM REDUCTION SERVICES



- OPIOID SUBSTITUTION TREATMENT (OST): METHADONE, BUPRENORPHINE AND NALOXONE ARE AVAILABLE ONLY TO REGISTERED PATIENTS AND ADMINISTERED AS A DIRECTLY OBSERVED THERAPY.
- A PRISON NEEDLES AND SYRINGE PROGRAM (PNSP) WAS INTRODUCED IN 2005.
- A SAFE TATTOOING PROGRAM IS ACTIVE IN PRISON SINCE 2017
- CONDOMS ARE READILY AVAILABLE IN DIFFERENT COMMON AREAS LOCATIONS

ADDITIONAL SERVICES DURING INCARCERATION AND POST-

RELEASE



- A NGO PROVIDES EDUCATIONAL PROGRAMS TO PEOPLE LIVING IN PRISON ON MANY TOPICS, INCLUDING BBVS
- PREPARATION BEFORE RELEASE IS PROVIDED BY A TEAM OF SOCIAL WORKERS AND COUNSELLORS INCLUDING PRISON HEALTHCARE STAFF AND NGO STAFF
- THERE IS AN EXISTING COLLABORATION BETWEEN PRISON HEALTHCARE SERVICES AND DRUG TREATMENT SERVICES IN THE COMMUNITY.

