

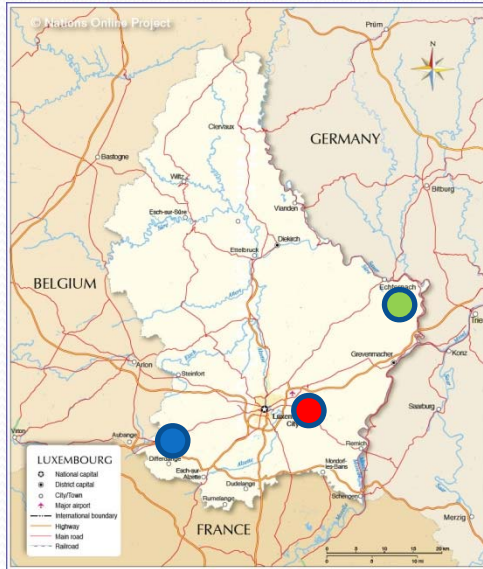
Prevention and Control of viral hepatitis in IDU/prisoners in Luxembourg

VHPB Meeting Brussels

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To put you into the right context



Two prisons in Luxembourg

One closed setting in Schrassig

- 615 inmates for 600 places (295 prisoners / 320 pretrial detainees)
 - 155 LU-citizens vs 460 non LU-citizens
 - 580 men vs 35 women

- Drug related offences: 66 prisoners / 150 pretrial detainees

One half open setting in Givenich

- A prison without walls and fences, but nevertheless a prison
- Normal regime (working and sleeping in prison) and «half free regime (working outside for private employers and sleeping in prison)
- 74 inmates for 99 places, only prisoners, no ptd, 12 drug related offences
- Turnover: approx. 1000 / y



The medical service in Luxembourg prison in Schrassig

Somatic medicine

- Service of Centre Hospitalier de Luxembourg
 - 3 part time MD – 1 resident – 1 assistant
 - Different specialists coming into prison
 - 20 nurses – 1 head nurse
 - 24/7
 - 3 surgeries
 - 1 pharmacist – 4 preparators
 - different facilities (X-Ray, dentist, ophtalmologist, gynaecologist
 - Ultrasound, Fibroscan
- 8 half days of medical consultation – 13000 in 2016

Psychiatric service

- Service of Neuropsychiatric hospital in Ettelbruck
- Ambulatory care and intensive care unit
- Different specialists coming into prison
- Detect, treat and prevent mental disorders
- Pluriprofessional approach (MD, nurses, social assistant, ergotherapist)
 - 7/7 6am to 9.30pm

Our approach

Test

- Prison law: every inmate has to be seen by a MD within 24 hours after entry in prison
 - Complete history
- Blood test proposal (HIV, HAV, HBV, HCV, Syphilis, IGRA): take-up > 95%
 - Chest X-Ray
 - ECG

Treat

Prevent

Different harm reduction measures in place

- OST
- Vaccination program
- Needle and syringe exchange program
 - Condom provision
 - Safe tattoo project
- Information sessions and educational work
 - Working together with NGO's

What if an inmate is seropositive for hepatitis?

- Information by a MD asap
 - Proposal of vaccination (HAV, HBV) if necessary
- Ultrasound and Fibroscan (nurses are educated for FS)
- Appointment with the ID specialist within 2 weeks
- Discussion with the ID specialist (checkup every 3, 6 or 12 months or treatment)

If treatment:

- Based on EASL guidelines
- All DAA's for HCV treatment available
 - DOT is possible
- BA and ID specialist visit once per month or on demand
 - All costs funded by Ministry of Justice

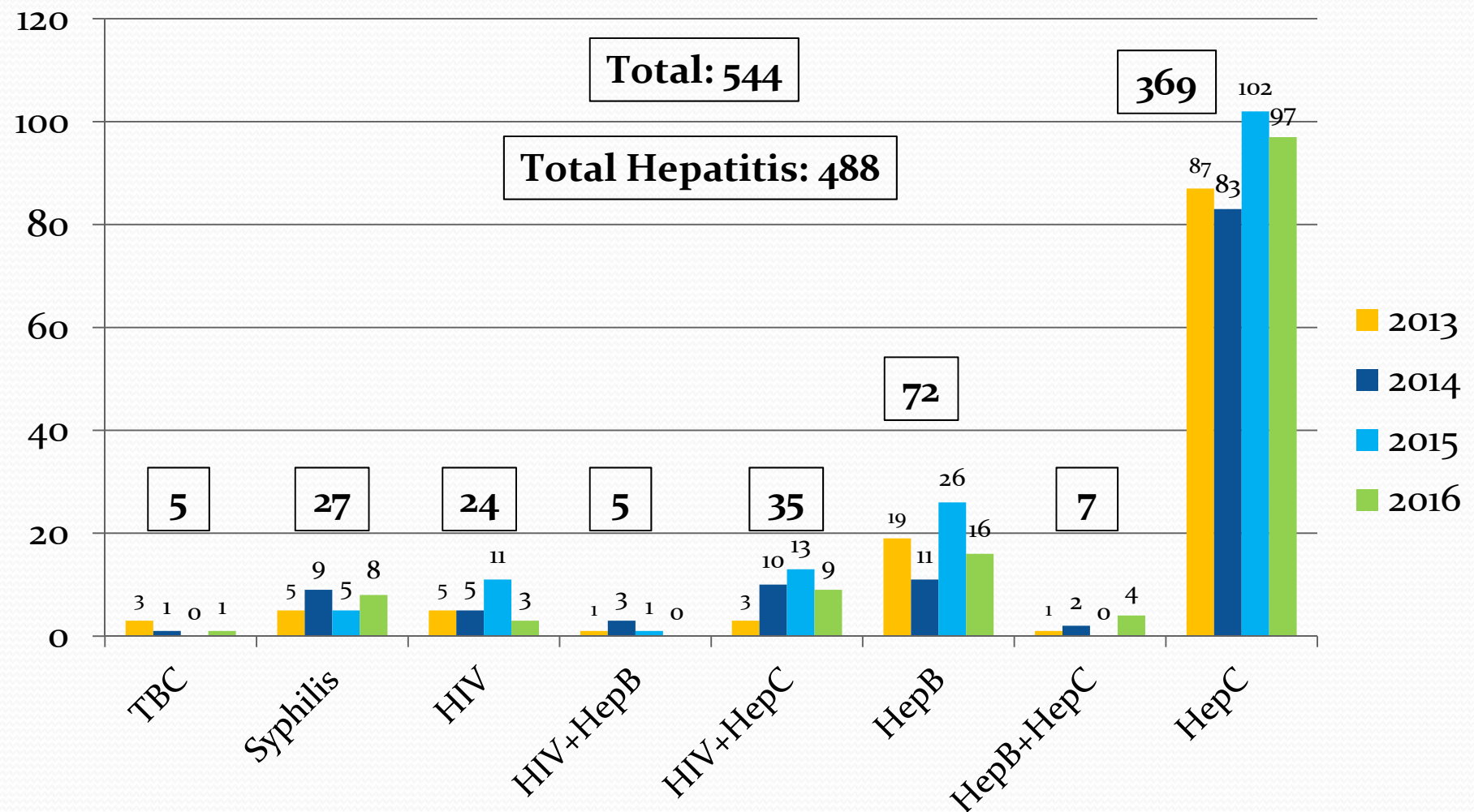
COMATEP

- Nurse practitioner coordinated clinic for infectious diseases in prisons
 - Project started in 2009
 - High number of inmates due to drug-related offences
- High prevalence of HIV, viral hepatitis and other infectious complications due related to illicit drug use
 - Required a standardised approach

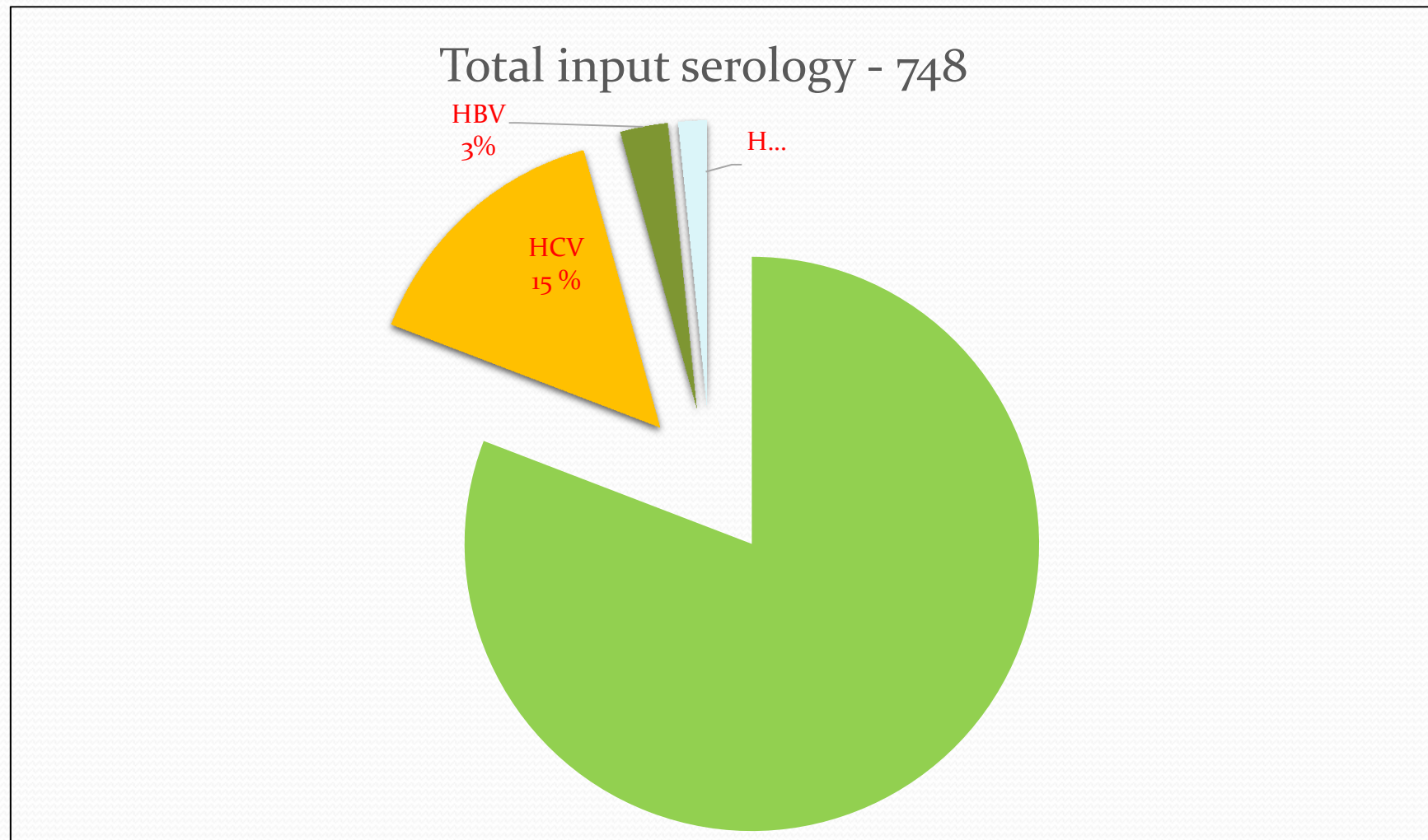
Work of the nurse in charge

- Verification if every inmate got a blood analysis
- Registration for MD consultation if serpositivity
 - Organization of the ID specialist consultation
- Preparation of request for blood analysis (follow-up)
 - Realisation of Fibroscan
- Realisation of questionnaire for the HCV study in prison
 - Counselling
- Organization of specific appointments (NGO's, ...)
- Preparation of the release (medical reports, treatment, blood analysis reports)
 - Informational sessions for prison employees

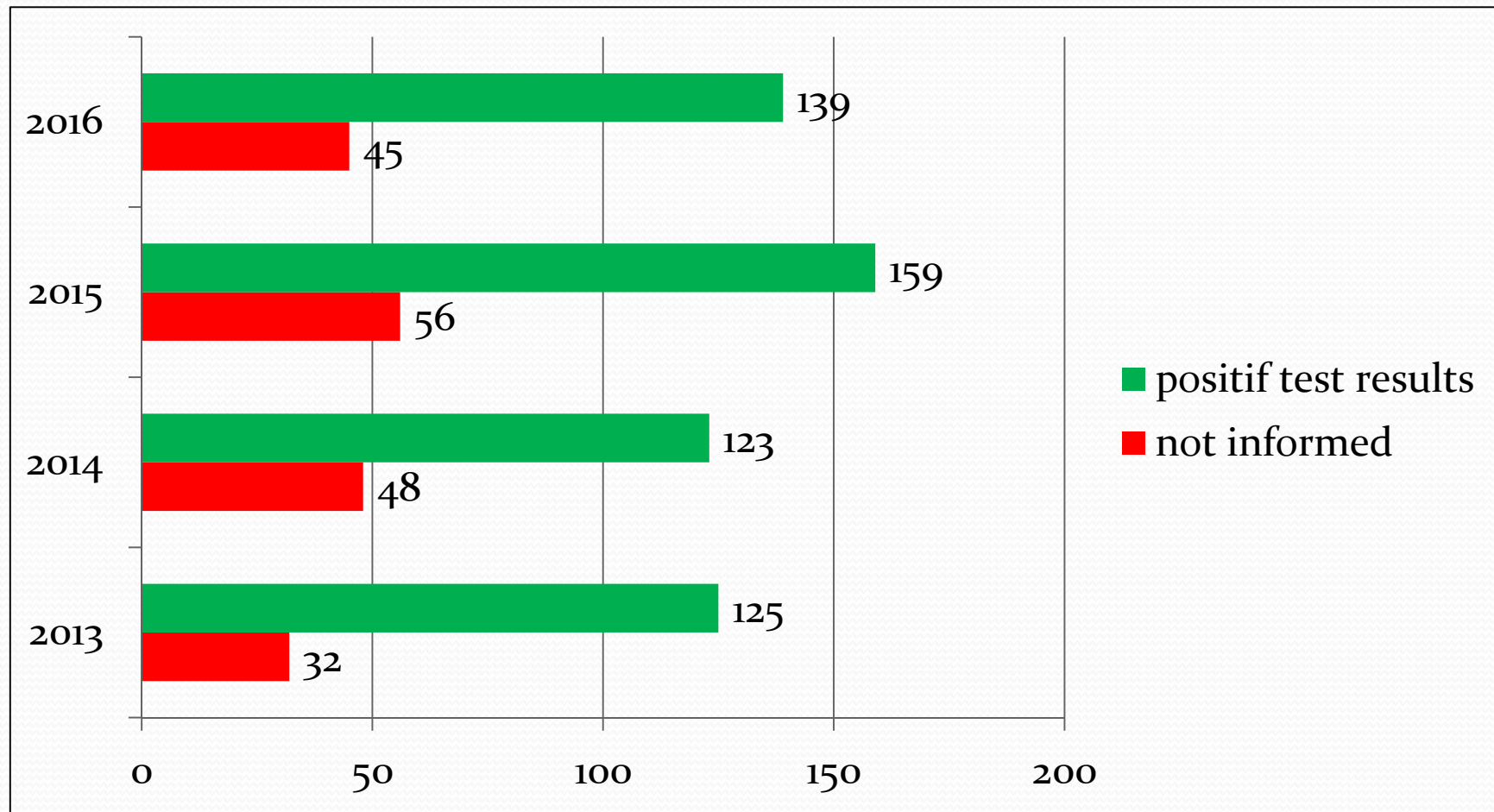
Statistics of screening outcomes



Prevalence in 2016 in prison of Schrassig



Awareness ?



33 % are not aware of their disease !

The treatments¹

Year	HCV	HBV
2011	16	2
2012	14	1
2013	13	2
2014	12	4
2015	11	3
2016	23	2
→ 05/2017	9	2
TOTAL	98	16

SVR₁₂ rate 64,6% for all treatments

SVR₁₂ rate 66% for DAA (72% 2nd gen)

LTFU 16,3% (8,1% SVR₃) for all treatments

LTFU 21% for DAA

Reinfection rate: 23% (42% of those
confirmation of reinfection by GT change)

For 34 reinfections, 29 occurred extramuros

Conclusions:

- A stay in prison is an effective opportunity to treat a group of HCV-infected patients which have otherwise very limited access to therapy
- Although a good success rate of HCV therapy was observed, the rate of reinfection after discharge from prison was high (5.1 / 100 person-years of follow-up)
- Prevention during treatment while patients are in prison as well as link to OST prescribers after discharge of prison should be strengthened.

¹ High recurrence rate of hepatitis C infection after treatment in prison inmates in Luxembourg. Devaux et al, 2017

Consultations and particular exams

Year	ID specialist consultation	Patients	Ultrasound	Fibroscan
2013	31	457	194	171
2014	26	346	141	198
2015	24	364	120	202
2016	26	328	86	182
Total	107	1495	541	753

Vaccinations

	HBV	HAV / HBV	HAV	TOTAL
2013	362	186	72	620
2014	318	193	56	567
2015	290	168	49	507
2016	311	153	47	511
TOTAL	1281	700	224	2205

The harm reduction measures

OST

- Psychiatric service
- Methadone and Buprenorphine + Naloxone
- DOT

	2014	2015	2016
Under OST	18%	18%	15%
Average patients per day	80	64	63
Average time under OST	140 days	151 days	146 days
Average dose per day (M)	21mg	23mg	23mg
Lowest - highest dose (M)	1mg – 100mg	1mg – 70mg	2,5mg-75mg
Average dose per day (B)	7,2mg	7,6mg	7,7mg
Lowest – highest dose (B)	1mg – 24mg	1mg – 18mg	1mg – 16mg

The harm reduction measures

PNSP

- Done by the somatic medical service
- Information at the entry in prison by MD
- Contract inmate / medical service
 - A one to one exchange
- Including counselling by a nurse



Year	Kits distributed	Syringes
2005	14	No stats
2006	23	283
2007	24	77
2008	36	178
2009	33	261
2010	34	328
2011	30	440
2012	48	1383
2013	31	1726
2014	46	2101
2015	40	1767
2016	31	1612
TOTAL	390	10156

The harm reduction measures

Condom provision

- Condoms and lubricants are easily accessible at different locations inside the prison
 - Provision is generally well accepted
- No security problems or other disadvantages
 - No count

The harm reduction measures

Safe tattoo project



- An Erasmus + project
 - Project within an university degree obtention by a nurse
- Research: 1 of 2 inmates has a tattoo from which 1 of 3 got an illegal tattoo in prison
- Inmates get a training in tattooing and in hygiena / transmittable disease
 - Started in march 2017
- Since now 245 hours of tattoing have been performed in 87 appointments
 - 9 tattooers are trained and 52 inmates got at least one tattoo



Conclusions

- Hepatitis in prison is common
 - Treating hepatitis in prison is an option
 - Harm reduction measures should be in place
- HRM should be a comprehensive package including OST, PNSP, condom provision, vaccinations program and others
 - Open the prison for NGO's and other services
 - Build a bridge for after release follow-up
 - Prison Health = Public Health

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