Impact of COVID-19 on HIV-testing Among Community Centers in Catalonia – A Time Series Analysis

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Conflict of interest: Authors have no financial interests or relationships to disclose.

Background

The COVID-19 pandemic changed landscape of health service delivery, increasing challenges during access to health care and exacerbating health inequities among people living with HIV and persons at higher risk for contracting HIV.[1]

Impact of the COVID-19 pandemic on community-based testing for HIV, viral hepatitis and sexually transmitted infections in the WHO European Region, March to August 2020

Laura Fernàndez-López [1,2], Daniel Simões [3,4], Jordi Casabona [1,2]; EuroTEST COVID-19 Impact Assessment Consortium of Partners

Collaborators, Affiliations + expand
PMID: 36928984   PMCID: PMC10234647   DOI: 10.1093/eurpub/ckad010

The impacts of COVID-19 pandemic on service delivery and treatment outcomes in people living with HIV: a systematic review

SeyedAhmad SeyedAlinaghi, Pegah Mirzapour, Zahra Pashaei, Arian Afzalian, Marcarious M. Tantuoyir, Roghayeh Salmani, Seyed Farzad Maroufi, Parinaz Parankhoo, Seyede Parmis Maroufi, Hajar Badri, Sanaz Varshochi, Farzin Vahedi, Esmaeil Mehraeen ✉ & Omid Dadras

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Consequences of COVID-19 crisis for persons with HIV: the impact of social determinants of health

Kristie C Waterfield [1], Gulzar H Shah [2], Gina D Etheredge [3], Osaremhen Ikhile [1]

Affiliations + expand
PMID: 33546659   PMCID: PMC7863613   DOI: 10.1186/s12889-021-10296-9
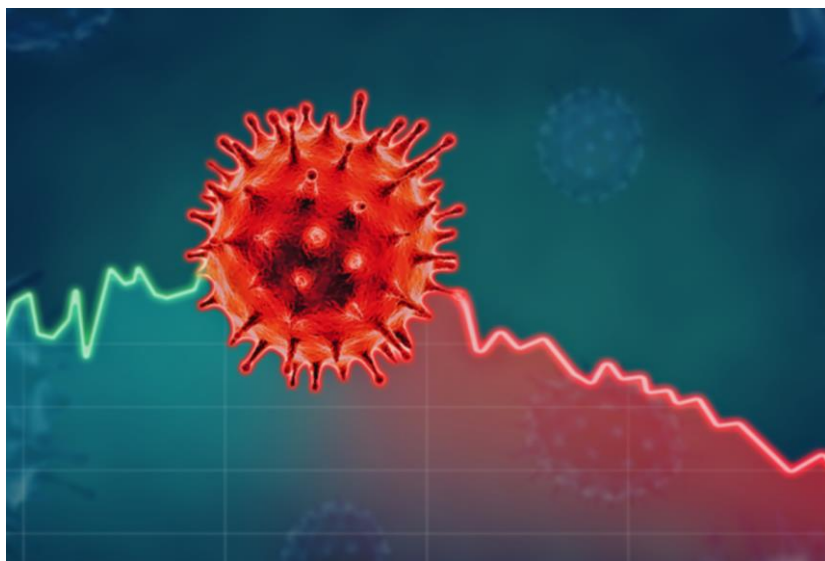
The COVID-19 pandemic has substantially impacted testing for HIV and other infectious diseases.[2,3,4]

Assessment of testing in WHO European region has demonstrated that 95% of participating testing centres found decrease in testing especially during first three months of the COVID-19 pandemic, and 58% decrease from June to August of 2020.[2]

1. Waterfield, K.C., Shah, G.H., Etheredge, G.D. et al. Consequences of COVID-19 crisis for persons with HIV: the impact of social determinants of health. BMC Public Health 21, 299 (2021). https://doi.org/10.1186/s12889-021-10296-9
2. Laura Fernàndez-López, Daniel Simões, Jordi Casabona, The EuroTEST COVID-19 Impact Assessment Consortium of Partners, Impact of the COVID-19 pandemic on community-based testing for HIV, viral hepatitis and sexually transmitted infections in the WHO European Region, March to August 2020, European Journal of Public Health, 2023;, ckad010, https://doi.org/10.1093/eurpub/ckad010
3. Public Health England 2020. Protecting and improving the nation's health. The impact of the COVID-19 pandemic on prevention, testing, diagnosis and care for sexually transmitted infections, HIV and viral hepatitis in England. Provisional data: January to September 2020 [Internet]. Accessed at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attach ment_data/file/943657/Impact_of_COVID-19_Report_2020.pdf
4. European Aids Treatment Group 2020. EATG Rapid Assessment COVID-19 crisis' Impact on PLHIV and on Communities Most Affected by HIV. 10 April 2020;1.Accessed at https://www.politico.eu/wp-content/uploads/2020/04/EATG-Rapid-Assessment- COVID19-1-.pdf.

Methods

Objective: To demonstrate changes in HIV testing trends and determine impact of COVID-19 on community-based voluntary counseling and testing (CBVCT) in Catalonia.

Data: 11 COBATEST member centers from Catalonia.

Study period: 1 January 2018 to 31 December 2020.

Data collection tool: COBATEST standardized data reporting.

Inclusion criteria: HIV test performed.

Data analysis:
- A time series analysis.
- SARIMA models were employed.
- Stratified by gender, age, and key-population groups.

Four periods analyzed:
Pre-Lockdown: 01-01-2018 to 12-03-2020
Lockdown: 13-03-2020 to 27-04-2020
De-escalation: 28-04-2020 to 21-06-2020
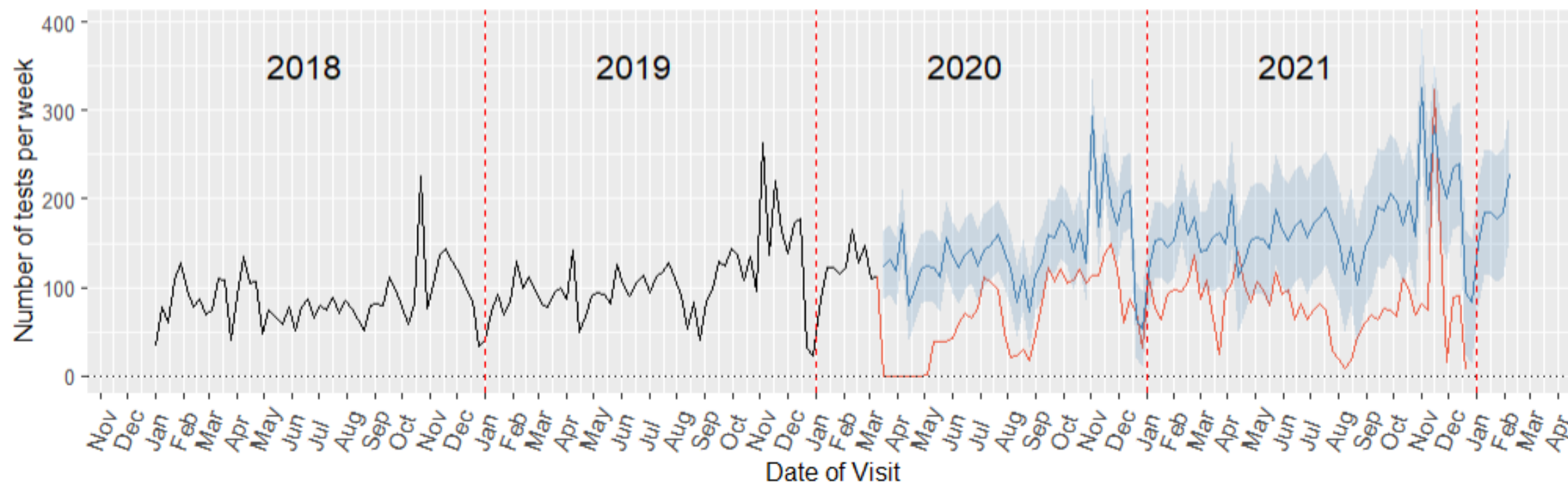New Normality: 22-06-2020 to 31-12-2020

Results

HIV tests performed per week (observed and expected)
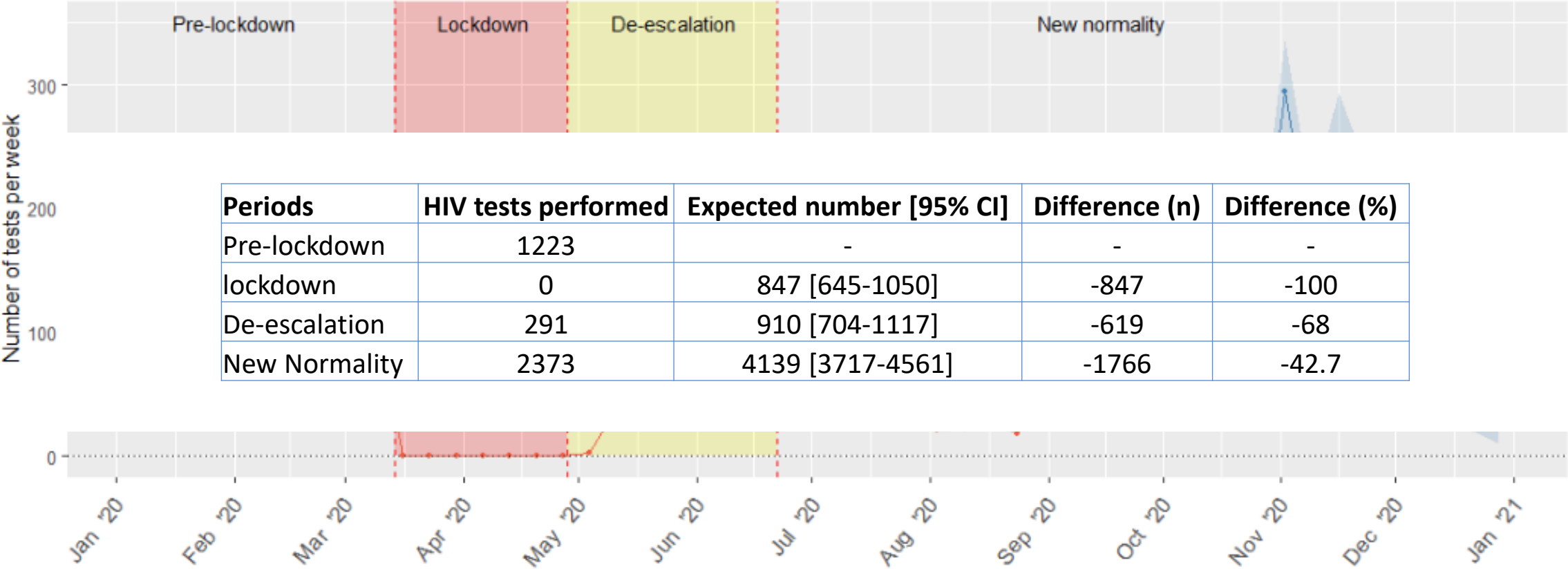COBATEST, 2018-2021

HIV tests performed per week (observed and expected)
COBATEST, 2020-2021

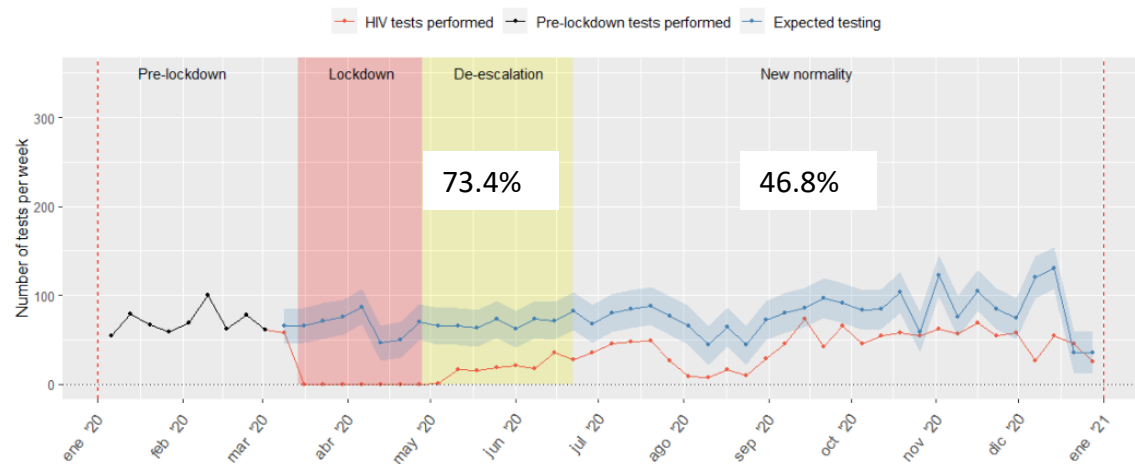Legend: —•— HIV tests performed   —•— Pre-lockdown tests performed   —•— Expected testing

Periods	HIV tests performed	Expected number [95% CI]	Difference (n)	Difference (%)
Pre-lockdown	1223	-	-	-
lockdown	0	847 [645-1050]	-847	-100
De-escalation	291	910 [704-1117]	-619	-68
New Normality	2373	4139 [3717-4561]	-1766	-42.7

HIV testing among male testers (per week)
COBATEST, 2020-2021

Legend: HIV tests performed — Pre-lockdown tests performed — Expected testing

Pre-lockdown | Lockdown | De-escalation | New normality

73.4%   46.8%

Number of tests per week

HIV testing among transgender testers (per week)
COBATEST, 2020-2021

Legend: HIV tests performed — Pre-lockdown tests performed — Expected testing

Pre-lockdown | Lockdown | De-escalation | New normality

91.8%   17.3%

Number of tests per week

HIV testing among female testers (per week)
COBATEST, 2020-2021

Legend: HIV tests performed — Pre-lockdown tests performed — Expected testing

Pre-lockdown | Lockdown | De-escalation | New normality

57.5%   40.2%
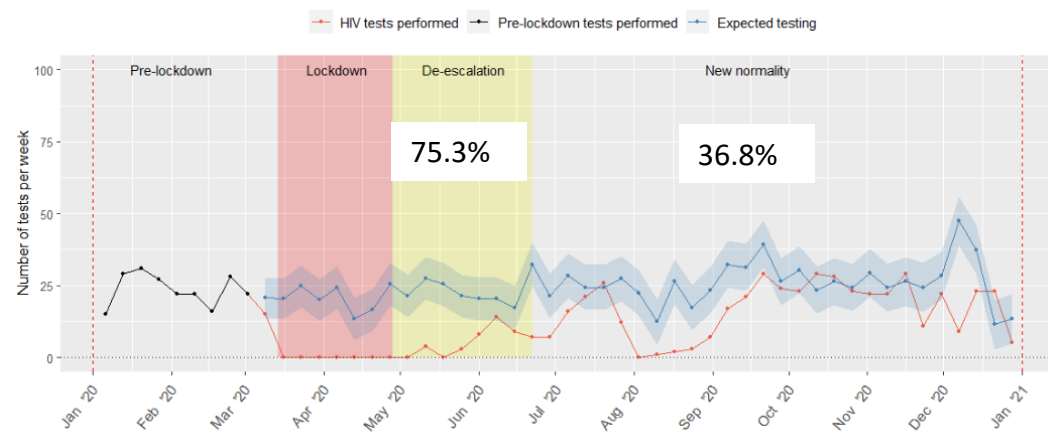
Number of tests per week
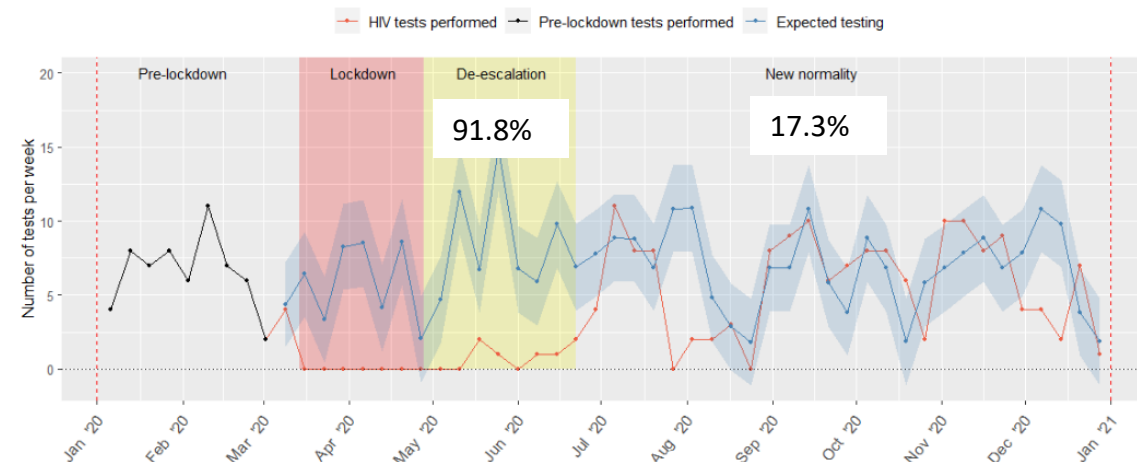
HIV testing by age group (16-25 y.o.) per week (observed and expected)
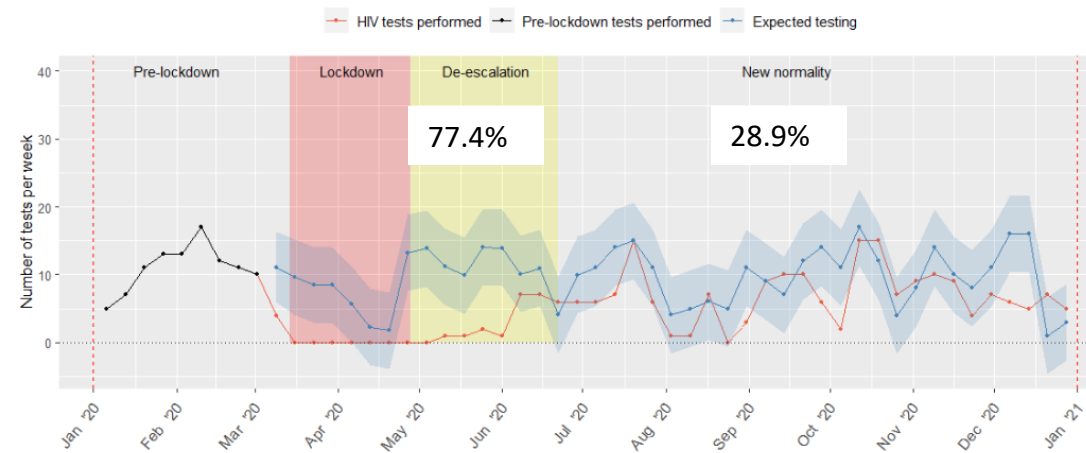COBATEST, 2020-2021
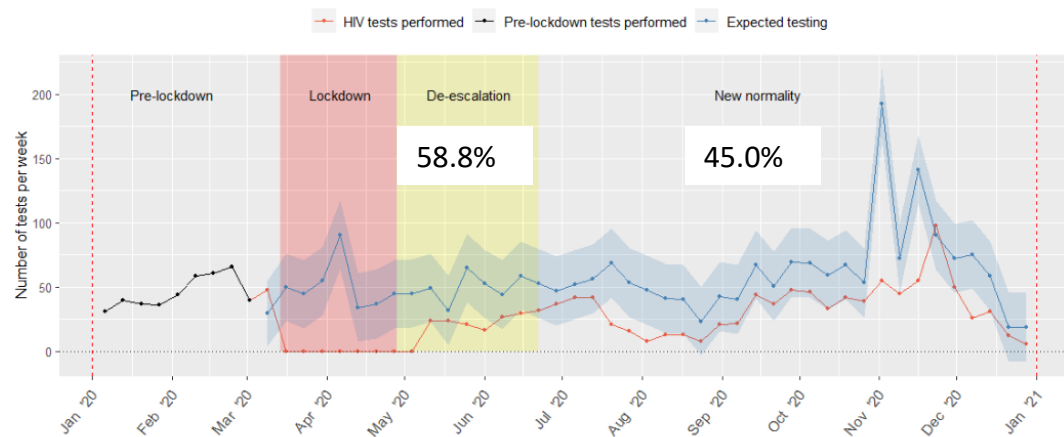
HIV testing by age group (26-35 y.o.) per week
COBATEST, 2020-2021
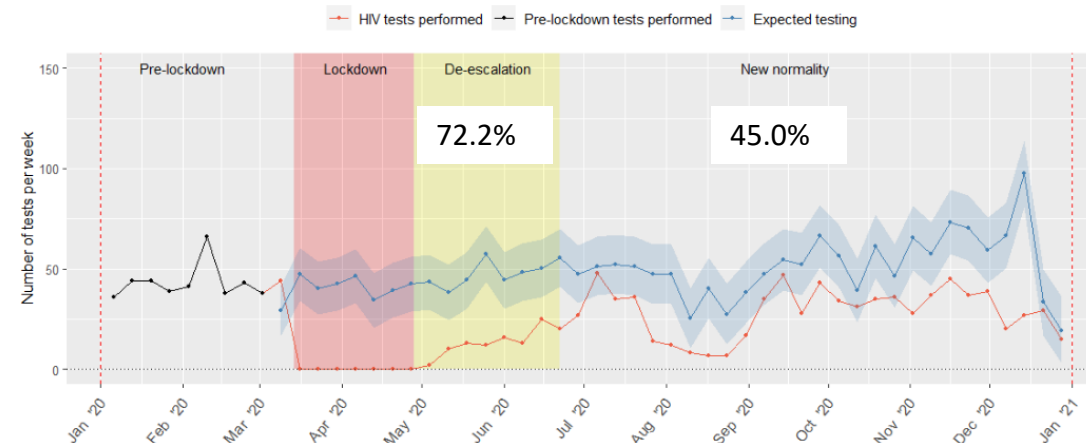
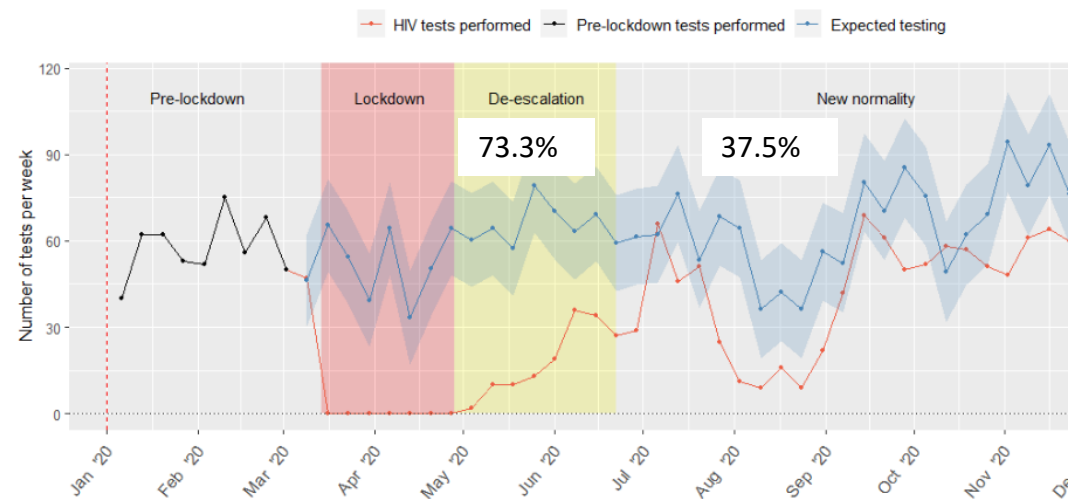HIV testing by age group (36-45 y.o.) per week
COBATEST, 2020-2021

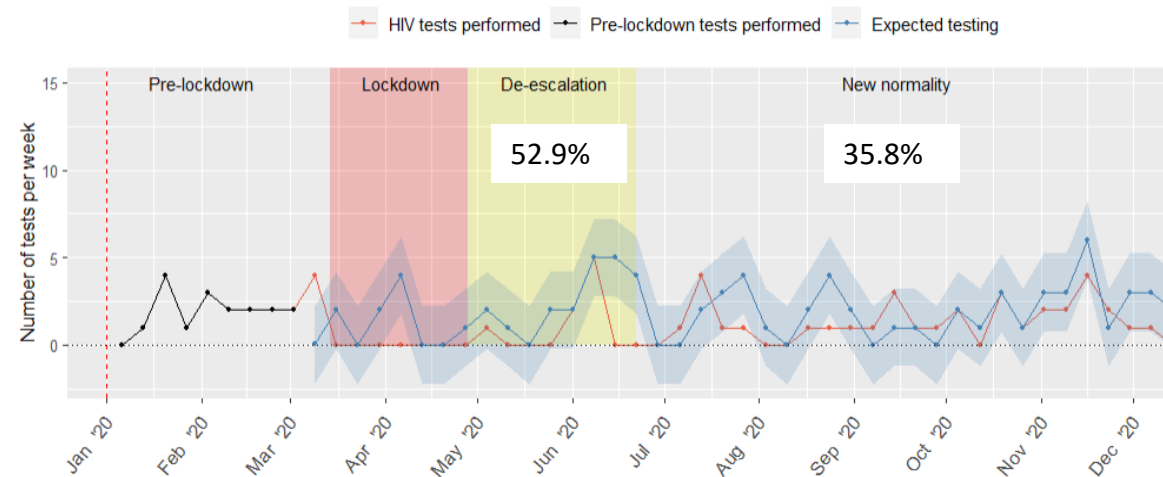HIV testing by age group (=46 y.o.) per week
COBATEST, 2020-2021

HIV testing among migrants per week (observed and expected)
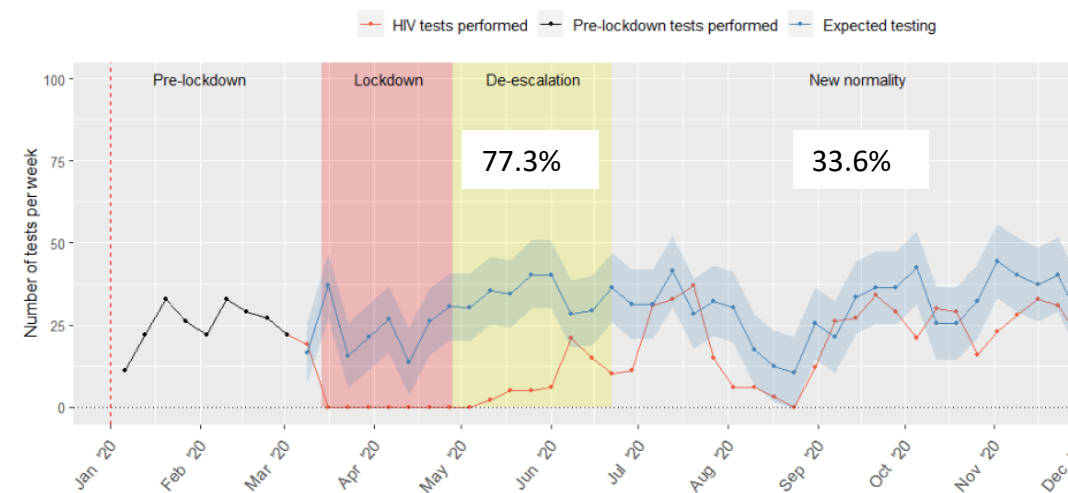COBATEST, 2020-2021

HIV testing among person who inject drugs per week (observed and expected)
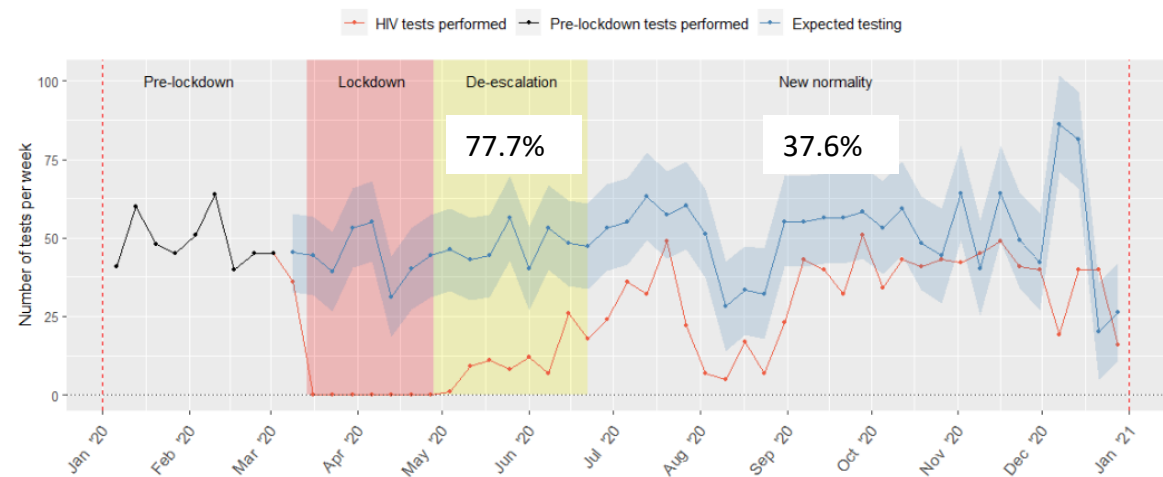COBATEST, 2020-2021

HIV testing among sex workers per week (observed and expected)
COBATEST, 2020-2021

HIV testing among MSM per week (observed and expected)
COBATEST, 2020-2021

Conclusions

HIV testing is still not back to 'normality'.

Targeted interventions should be developed to address testing among identified vulnerable groups (younger age groups, by gender) .

The study findings should be utilized to inform development of governmental procedures for pandemic response.

Thank you

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