Monitoring Community HIV Testing in Ireland, 2020

Version 1.1

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Key points

In 2020 Community HIV testing in Ireland was impacted by the COVID-19 pandemic. Despite the challenges of the pandemic, some community testing for HIV continued in Ireland.

In total 2,925 voluntary community-based HIV tests were carried out in 2020:

- By test method, 1,088 tests (37%) were carried out using rapid point-of care test methods and 1,837 (63%) were carried out using laboratory-based methods
- 64 people had a positive/reactive HIV test, corresponding to a 2.2% test reactivity rate
- By test setting, the test reactivity rate was highest (4.3%) in asylum/direct provision settings.

Demographic data was available for 2,304 (78.8%) tests:

- By gender, the test reactivity rate was higher among males (1.5%) than females (0.5%).
- By key population group, the rate was highest among migrants coming from countries of high HIV prevalence (2.7%), and among gay and bisexual men who have sex with men (gbMSM) (1.8%).
- Four people were identified as having previously been diagnosed with HIV. Excluding these four the test reactivity rate was 1.0%

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Contents

Introduction

A national surveillance system for the monitoring of community HIV testing in Ireland was established in 2018.[1] Voluntary community-based HIV testing (VCBT) aims to reduce the undiagnosed population of HIV-positive individuals, enabling early diagnosis and treatment.

Monitoring VCBT is helpful to establish trends in community HIV reactivity rates and determining whether people most at risk of HIV infection are being reached. This report presents a summary of the results of VCBT in Ireland undertaken in 2020, for data received up to 8th February 2022.

The HSE-Health Protection Surveillance Centre (HPSC) has partnered with HSE Social Inclusion and Vulnerable Groups; and a number of non-government organisations (NGOs) and other community-based organisations (CBOs) to collect data on VCBT. (Appendix B)

The *HIV/AIDS surveillance in Europe report: 2021 – (2020 data)* from WHO and ECDC recognizes that HIV testing strategies should be 'reconsidered' and 'diversified' to combat challenges presented by the COVID-19 pandemic. An emphasis is placed on community based testing, self-testing and lay providers of testing.[2]

Methods

Before 2020, VCBT monitoring partners submitted data to HPSC on a quarterly basis. Due to the COVID-19 pandemic, collection of data was paused and in Quarter 4 2021 HPSC requested data submissions from partners for data relating to 2020 testing.

The available anonymised case-based data were collated, including demographic characteristics, test setting, and information on test results. Data collection was performed in line with European Centre for Disease Prevention and Control (ECDC) recommendations.[3]

Data were collected electronically using a standardised template that contained predetermined answer options, provided by HPSC.

VCBT services are provided free of charge in a range of settings in Ireland. There are two methods in routine practice for HIV testing; rapid point of care testing (POCT) and laboratory-based testing, these methods are further described in the Technical notes.

The completeness of data in 2020 is provided in Appendix C. Of the nine participating organisations/programmes, eight provided disaggregate data, including data on previous HIV diagnosis and demographic characteristics. One organisation (Balseskin Reception Centre) could not provide disaggregate data and instead provided the number of HIV tests and the number of people that had a positive test result.

The denominator used to calculate HIV test reactivity rate is 'all tests carried out', not 'individuals tested', as some people may have tested more than once during 2020.

The results are presented as HIV test reactivity rate; this can also be called HIV testing prevalence rate or HIV seropositivity rate.

Results

In total, 2,925 community-delivered HIV tests were reported to HPSC in 2020 from nine participating organisations. Of those, 1,088 tests (37%) were carried out using rapid POCT methods and 1,837 (63%) were carried out using laboratory-based test methods.

Table 1 presents the number of positive/reactive HIV tests and test reactive rate by test setting.

i. Test Setting

The highest proportion of tests were carried out in non-governmental organisation (NGO) headquarters (n=1,528, 52%), followed by asylum/direct provision settings (n=898, 31%).

Of the 898 tests in asylum or direct provision settings, 277 were NGO delivered and 621 were HSE delivered (Balseskin Reception Centre).

ii. Positive/Reactive Rate

Of the 2,925 tests, 64 people had a reactive/positive HIV test, corresponding to a 2.2% test reactivity rate.

The test reactivity rate was highest (4.3%), in asylum/direct provision settings. There were 898 test results provided by asylum or direct provision settings and of these 39 were positive/reactive (Table 1).

Results from Centre with aggregate data

Six hundred and twenty-one HIV tests were carried out in Balseskin Reception Centre as part of the holistic health screening programme. Balseskin is Ireland's largest asylum accommodation centre, and provides specialist medical and nurse delivered health screening for international protection applicants arriving to Ireland for the first time.

36 (25 female and 11 male) people had a reactive/positive HIV test corresponding to a 5.8% test reactivity rate. All 36 arrived from countries in sub-Saharan Africa. Balseskin reported that the majority (~85%) of those with a positive HIV test were previously diagnosed HIV

positive in Africa before arrival to Ireland and already on antiretroviral drugs (ARVs). All 36 were linked to HIV care and treatment services in Ireland.

As disaggregate data could not be provided, Balseskin could not be included in the demographic analysis and are excluded from the remainder of the results section.

Results from Centres with disaggregate data

The remaining eight participating organisations reported 2,304 tests. These centres could provide disaggregate data and could identify whether a client/patient was subsequently identified as having been previously diagnosed HIV positive. Of the 28 positives within these eight organisations, four (14%) were previously diagnosed HIV positive, excluding these four reduced the reactivity rate among these eight organisations from 1.2% to 1.0%.

The data completeness is reported in Appendix C and the number of tests and test reactivity rates by test method are presented in Appendix D.

Table 1 Number of positive/reactive HIV tests and test reactivity rate (%) by test setting, voluntary community-based testing in Ireland, 2020

	All tests	Positive /Reactive tests	Test reactive rate	Test reactive rate excluding people previously diagnosed HIV positive
	n	n	%	%
Asylum/direct provision settings - NGO delivered	277	3	1.1	0.4
NGO headquarters	1,528	23	1.5	1.4
Bar/club	138	0	0.0	0.0
LGBT community resource centre	100	0	0.0	0.0
Emergency accommodation/homeless ID screening	85	1	1.2	1.2
Addiction service/resource centre	23	0	0.0	0.0
Sauna/sex-on-premises venue	23	1	4.3	4.3
University/College	126	0	0.0	0.0
Other*	4	0	0.0	0.0
Total (excluding Balseskin)	**2,304**	**28**	**1.2**	**1.0**
Asylum/direct provision settings - HSE Delivered (Balseskin)**	621	36	5.8	-
Total	**2,925**	**64**	**2.2**	**-**

*Other includes festivals, community groups, general workspaces, prison services and other/unknown settings.
**Exact number of people subsequently identified as previously diagnosed HIV positive in Balseskin is not available. Majority (Approx. 85%) of positives reported as having previous HIV diagnosis.

iii. Demographic characteristics

Eight out of nine participating organisations/programmes could provide case-based data and an analysis of the demographic characteristics could be carried out.

Table 2 provides a demographic summary of people tested and of those with reactive tests. HIV test reactivity rate should be interpreted with caution due to low numbers tested (<100) among some demographic subgroups.

By gender, the test reactivity rate was higher among males (1.5%) than females (0.5%). The median age among those with positive/reactive tests was 28.5 years.

Among the 28 people who had a positive/reactive test, 15 (54%) were born abroad and two (7%) were born in Ireland (region of origin was not reported for remaining 11 people). By region of origin, the test reactivity rate was highest among people born in sub-Saharan Africa (2.8%) followed by people from Latin America and Caribbean (2.6%).

Individuals could be reported as part of one or more key population/at-risk group. The test reactivity rate was highest among migrants coming from countries of high HIV prevalence (2.7%), and among gay and bisexual men who have sex with men (gbMSM) (1.8%).

Table 2 HIV test reactivity rate (%) and demographic characteristics, voluntary community-based testing in Ireland, 2020 (n=2,304) [Excludes testing at Balseskin Reception Centre]

		All tests	Positive/ Reactive tests	Test reactivity rate
		N	N	%
Total		2,304	28	1.2
First time testing for HIV	Yes	618	9	1.5
	No	1,349	15	1.1
	Unknown	337	4	1.2
Gender identity*	Male	1663	25	1.5
	Female	620	3	0.5
	Trans male	9	0	0.0
	Trans female	4	0	0.0
	Other/Unknown	8	0	0.0
Age in years (median, range)		29 (17-86)	28.5 (21-47)	
Age group	17-24	568	6	1.1
	25-29	583	9	1.5
	30-39	736	8	1.1
	40-49	255	5	2.0
	50-59	76	0	0.0
	60+	28	0	0.0
	Unknown	58	0	0.0
Region of origin	Ireland	577	2	0.3
	Latin America and Caribbean	228	6	2.6
	Sub-Saharan Africa	145	4	2.8
	Central or Eastern Europe	123	1	0.8
	Western Europe	156	2	1.3
	North Africa and Middle East	145	0	0.0
	South and South East Asia	90	2	2.2
	Other**	27	0	0.0
	Unknown	813	11	1.4
Key population group***	Men who have sex with men	1,122	20	1.8
	Sex with a person of opposite sex	831	5	0.6
	Migrant coming from a country of high HIV prevalence	113	3	2.7
	People who have ever injected drugs	32	0	0.0
	Sex workers/escorts	10	0	0.0

*Gender identity refers to a person's internal sense of themselves (how they feel inside) as being male, female, trans male, trans female or something else. This may be different or the same as a person's assigned sex at birth. Further information and resources can be found at the website of Transgender Equality Network Ireland (www.teni.ie).

**Other Includes Australia & New Zealand and North America.

***Individuals could be reported as part of one or more key population/at-risk groups. Countries of high HIV prevalence are countries with HIV prevalence >1% in the adult population, as per the UNAIDS 2014 The Gap Report.

Discussion

The COVID-19 pandemic caused significant disruption to voluntary community HIV testing in Ireland. Since the beginning of the pandemic, community testing has been impacted by general restrictions imposed to curtail spread of COVID-19. Access to testing was reduced as many of the testing venues were closed to patrons.

In 2020, 2,925 test results were reported to HPSC for voluntary community HIV testing. This represents a 48% decrease compared to 2019 (n=5,607). Until 2020 a significant proportion of community testing has taken place in social settings such as bars, nightclubs, saunas, etc. Limitations on access to these venues presented a barrier to testing which is seen as a risk that could delay diagnosis of new HIV cases.

The impact of COVID-19 on testing for HIV in Ireland is in line with that seen in other countries in the European region as described by the EuroTest Survey.[4] EuroTest indicated severe disruption to community HIV testing sites and highlighted a number of themes that are also seen during the 2020 period in Ireland. Community partners reported a number of barriers to HIV testing in 2020, including: closure of testing sites due to lockdown restrictions; re-allocation of staff to support COVID-19 response; reduced availability and attendance of 'in person' testing sites.

Service providers reported that accessing the hardest to reach populations was extremely difficult as capacity and opportunities for outreach were reduced. Concern regarding the possibility of late presentation, especially in the most vulnerable groups, drove development of community approaches to HIV testing. Some services, including HIV Ireland's MPower programme and SH24, can now provide options for self-testing which has shown significant demand.

The WHO and ECDC have published guidance on HIV testing which 'recommend innovative approaches including self-testing and community testing by lay providers using rapid tests as part of overall HIV testing services'.[5-7]

HIV testing in 2020 was performed in line with UK National Guidelines for HIV Testing, 2008. In late September 2020 this guidance was replaced by a joint guideline for HIV testing in adults published by British HIV Association (BHIVA) / British Association for Sexual Health and HIV (BASHH) / British Infection Association (BIA).[8]

Both 2008 and 2020 guidance recommend fourth-generation HIV laboratory tests with venous sampling as the first-line choice, with rapid point-of-care tests (POCTs) also available as an alternative that might be suited to community and home testing. In both guidelines confirmatory testing is recommended for any reactive POCT.[8, 9]

There is currently no cost-effectiveness threshold for HIV testing in community settings. The VCBT reactivity rate in 2020 exceeds the recommended seropositivity threshold deemed to be cost effective for routinely offering HIV testing in hospital settings (0.1%).[8]

Test reactivity rates overall and among specific key population groups such as migrants coming from countries of high HIV prevalence, and MSM, highlight the importance of sustained targeted VCBT services to ensure vulnerable groups continue to be reached. The COVID-19 pandemic interrupted services in multiple ways and made outreach to key groups more difficult, but has also allowed for innovation and development of testing strategies that are considered more acceptable to some users.[10]

Impact of COVID-19 Pandemic

Due to the impact of the COVID-19 pandemic, there was a reduction in the number of HIV notifications during 2020 (n=444) compared with 2019 (n=532). This is likely to be due to a number of factors including long periods of national lockdown, social and physical distancing measures, reduced availability of sexual health and GP services, reduced testing opportunities, and a reduction in number of new entrants to the asylum process in Ireland in 2020.

The COVID-19 pandemic also affected the collection and reporting of enhanced surveillance data variables, such as probable route of transmission, region of origin, history of previous

positive test for HIV notifications in 2019, 2020 and 2021 (particularly during 2020). Initiatives to improve data quality are currently underway but all enhanced surveillance data for this time period should be interpreted with caution. [11]

In November 2020 some HIV community testing service providers reported that they had been able to continue to provide some level of reduced service through their offices. Others had to pause their community HIV testing to focus on COVID based work with their service users, or because they were unable to provide a service safely, or within government regulations for COVID-19.

Service Developments

November 2020 also saw the launch of a pilot project where HIV self-test kits were provided to participants by the HIV Ireland MPOWER programme. There was extremely high demand for kits, with all available kits (n=2,000) being ordered and distributed within 13 days of the pilot launch. Six hundred and thirty-nine (32%) of the 2,000 individuals responded to the pilot evaluation survey, with one service user reporting a reactive result through the evaluation form. Four additional reactive results were reported to MPOWER directly. These five reactive results from 639 reported tests constitutes a 0.8% reactivity rate. However, as 1,361 service users who ordered a HIV self-test through this service did not disclose their result, there may be underreporting of reactive results. Results from this pilot are not included elsewhere in this report.

An additional service (Mater Sláintecare Project) was able to provide data for the first time in 2020, following commencement of a pilot programme offering VCBT in February 2020.

In 2021, the HSE piloted a free online STI/HIV testing service, in collaboration with online partner SH24 and integrated with public STI clinics in Ireland. This enabled people aged 17 and over to order a free STI test kit to their home. The pilot was delivered in 3 counties: Dublin, Cork, and Kerry (to have an urban/rural mix), and has been expanded to include 22 counties by early 2022. The HSE online STI/HIV testing service had not started in 2020 and data from this service is not included in this report.

Technical notes

1. There are two methods in routine practice for HIV testing:
   i. laboratory-based tests performed on samples obtained through venipuncture, and which test for HIV antibody and p24 antigen simultaneously; and
   ii. self-sampling, self-testing, and rapid point-of-care tests (POCTs) which can be performed in the clinic, in the community setting or as a home test.[8] Someone with a reactive test should be referred to a confirmatory lab-based testing service.

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Appendices

Appendix A: Membership of the Community HIV Testing Monitoring Steering Group

Name	Organisation
Derval Igoe	HSE Health Protection Surveillance Centre (HPSC)
Natasha Rafter	HSE Health Protection Surveillance Centre (HPSC)
Naomi Petty Saphon	HSE Health Protection Surveillance Centre (HPSC)
Mark Campbell	HSE Health Protection Surveillance Centre (HPSC)
Kate O'Donnell	HSE Health Protection Surveillance Centre (HPSC)
Erin Nugent	HIV Ireland and the MPower programme
Adam Shanley	HIV Ireland and the MPower programme
Caroline Hurley	HSE Sexual Health and Crisis Pregnancy Programme (SHCPP)
Margaret Fitzgerald	HSE National Social Inclusion Office
Evan Murphy	HSE Community Health Organisation (CHO 9)
Aisling Ni Tuathail	Mobile Health and Screening Unit, Safetynet Primary Care
Paul Duggan	Mater Sláintecare Project
Richard Carson, Yvon Luky	AIDS Care Education & Training (ACET) Ireland
Cillian Flynn	GOSHH Ireland
Joe McDonagh	Sexual Health West (formerly AIDS West)
Catherine Kennedy	Sexual Health Centre

Appendix B: List of data providers in 2020, HIV community testing monitoring

	Organisation/Programme
1	AIDS Care Education & Training (ACET) Ireland
2	Balseskin Reception Centre (HSE CHO Area 9) **(aggregate data provided)**
3	GOSHH Ireland
4	HIV Ireland and its MPower Programme (formally KnowNow Dublin)
5	Mater Sláintecare Project, Dublin
6	Safetynet Primary Care Mobile Health and Screening Unit (MHSU)
7	Sexual Health Centre, Cork
8	Sexual Health West (formerly AIDS West)

Appendix C: Data completeness, HIV community testing monitoring 2020 (n=2,304)

[Excludes Balseskin Reception Centre]

	All tests		Positive/reactive tests	
	n complete	% complete	n complete	% complete
Total tests	**2,304**	**-**	**28**	**-**
First time testing for HIV	1,967	85.4%	24	86%
Gender identity	2,302	99.9%	28	100%
Age group	2,223	96.5%	28	100%
Region of origin	1,491	64.7%	17	61%
Key population/at-risk group	2,001	86.8%	27	96%
If test result positive/reactive, patient/client previously diagnosed HIV positive?	-	-	23	82%
If positive/reactive HIV test, confirmation test positive?	-	-	23	82%
If positive/reactive HIV test, patient linked to HIV care and treatment services?	-	-	27	96%

Appendix D: Number of positive/reactive HIV tests and test reactivity rate (%) by test method and service type, voluntary community-based testing in Ireland, 2020 (n=2,925)

	Number of tests	Number of reactive/ positive tests	Percentage (%) positive/reactive
Lay provider (rapid POCT)	1,088	13	1.2
Medical provider (laboratory-based 4th gen test)	1,837	51	2.8

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