



Antenatal HIV Screening in Ireland, 2020 and 2021

June 2023

Health Protection Surveillance Centre

Acknowledgements

The Health Protection Surveillance Centre (HPSC) would like to sincerely thank the staff in all maternity hospitals and maternity units for providing antenatal screening data for 2020 and 2021, and to other staff in regional Departments of Public Health (Northwest) and Laboratories (Southeast) for collating their regional data.

These slides may be copied and reproduced, provided HPSC is acknowledged. Suggested citation: HSE-Health Protection Surveillance Centre. Antenatal HIV Screening in Ireland, 2020 and 2021. Dublin: HSE HPSC; 2023.

Key points

Aggregate data on HIV antenatal screening results in public patients were provided by all 19 maternity hospitals/units in 2020 and 2021.

- Data on results in private patients was not provided by seven hospitals.

The national reported uptake of HIV antenatal screening in both 2020 and 2021 was almost 100%.

The HIV prevalence (previously known and new infections) among pregnant women in 2020 and 2021 was 0.11%, similar to that observed in recent years.

- From 2003 to 2015, there was a statistically significant decline in the prevalence of HIV diagnoses among pregnant women
- Since 2015, the trend has remained stable.

The HIV prevalence of new infections (not previously known) in 2020 and 2021 was 0.01%, similar to the prevalence observed in recent years.

- There was a period of decline from 2003 – 2013
- The prevalence of new infections has remained stable since 2013.

Background

Transmission of HIV from an HIV positive mother to her child during pregnancy, labour, delivery or breastfeeding is called mother-to-child transmission (MTCT), or vertical transmission.

Diagnosis of HIV in pregnancy allows for effective interventions to be implemented and has dramatically reduced the risk of HIV transmission from mother-to-child during pregnancy, delivery and in the postnatal period to less than 1% ([1](#), [2](#)).

The objectives of HIV antenatal screening are to:

- identify women who are living with HIV so they can be offered immediate treatment for their own clinical benefit
- prevent transmission of HIV to their child, and
- prevent transmission of HIV to their sexual partners.

Background

A national voluntary programme of HIV antenatal screening has been in place in Ireland since 1999. As part of this programme, it is recommended that HIV testing be offered to all women who attend for antenatal services.

The test is offered during the first trimester so women living with HIV are identified and can begin treatment early to maximise clinical benefit for both mother and child.

A system for monitoring the routine antenatal testing programme was established in 2001 by the Health Protection Surveillance Centre (HPSC).

This report describes data from the HIV antenatal screening programme in Ireland in 2020 and 2021. Further information on the screening programme can be found at <http://www.hpsc.ie/a-z/hivandaids/antenatalhivtesting/>.

Data collection

Aggregate data on uptake of screening and the numbers of HIV diagnoses in pregnancy (known and new) are requested annually from all maternity hospitals/units and collated nationally by HPSC (Appendix 1).

Due to the COVID-19 pandemic, there was a delay in collection of data from some hospitals and data from 2020 and 2021 are being reported together.

A copy of the HIV antenatal data collection form can be found at <https://www.hpsc.ie/a-z/hivandaids/antenatalhivtesting>

Some hospitals can provide data on public patients only.

HIV antenatal screening, 2015 to 2021

	2015	2016	2017	2018	2019	2020	2021
Number of hospitals/units	18/19	16/19	18/19	18/19	19/19	19/19	19/19
Number of live births per year*	65,909	63,897	62,053	61,016	59,294	55,959	58,443
Number of women booked	63,217	56,865	62,720	58,401	58,343	58,706	57,281
Number of women offered HIV test	63,217	56,865	62,720	58,354	58,343	58,706	57,281
Number of women tested	63,214	56,747	62,718	58,305	58,335	58,698	57,272
Uptake of HIV antenatal test (%)	100.0	99.8	100.0	99.8	100.0	100.0	100.0
Number HIV positive	84	83	82	97	80	66	62
Prevalence of HIV (%)	0.13	0.15	0.13	0.17	0.14	0.11	0.11
Number newly diagnosed HIV positive	9	10	11	14	9	3	5
Prevalence of new HIV diagnoses (%)	0.01	0.02	0.02	0.02	0.02	0.01	0.01

It is important to note that the antenatal screening data are based on date of antenatal screen rather than birth date. In addition, data on private patients was not fully captured.

*Data derived from <https://www.cso.ie/en/statistics/>

HIV antenatal screening data – 2020 and 2021

Data for 2020 and 2021 were provided by all 19 maternity hospitals/units in Ireland. Data on private patients were not provided for seven hospitals (see appendix 1 for details).

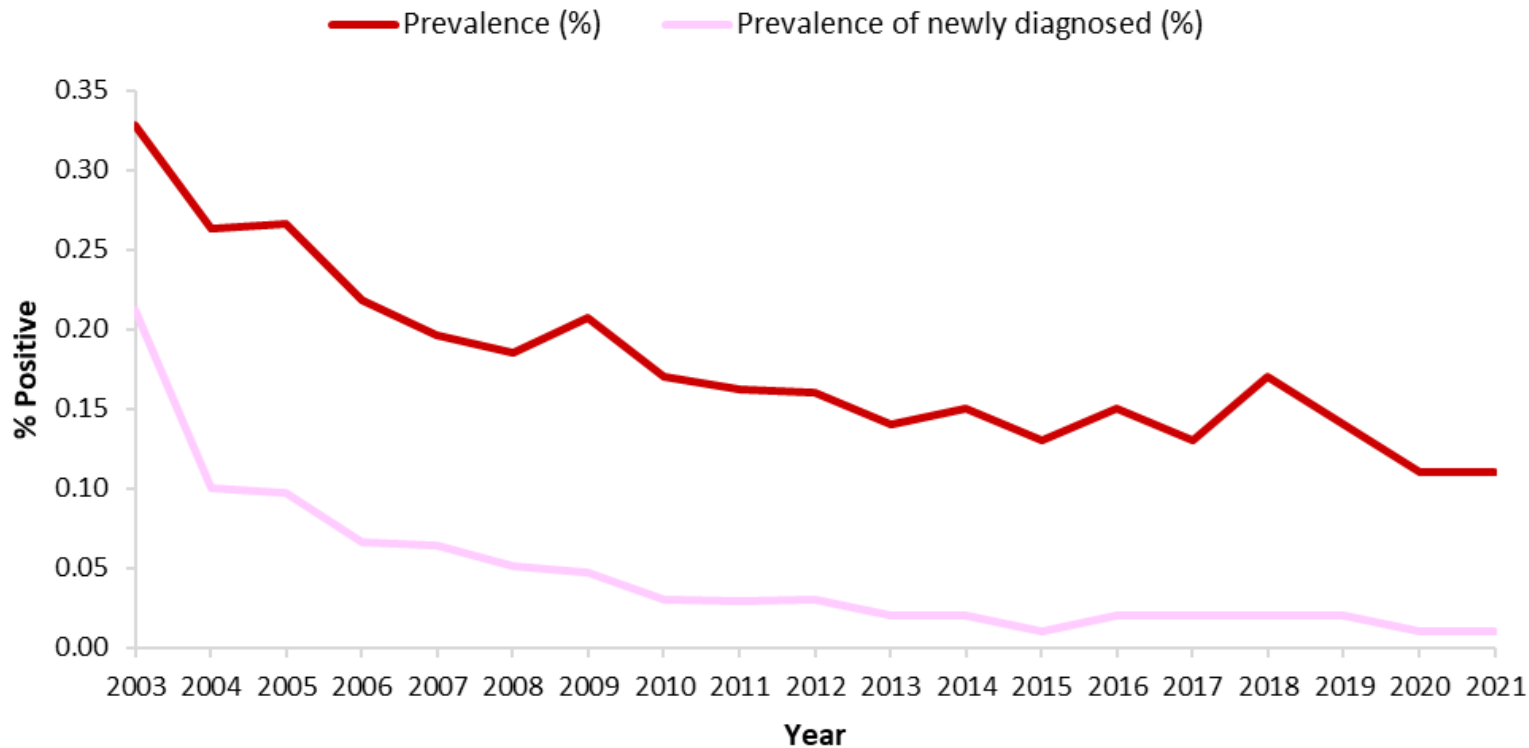
The prevalence (known and new) of HIV in both years was 0.11%. The prevalence varied by individual hospital:

- 0% to 0.22% in 2020
- 0% to 0.33% in 2021.

Prevalence of new infections (not previously known) in both years was 0.01%. The prevalence varied by individual hospital:

- 0% to 0.08 in 2020
- 0% to 0.09% in 2021.

Prevalence of known and new HIV diagnoses among pregnant women, 2003 to 2021



From 2003 to 2015, there was a statistically significant decline in the prevalence of HIV diagnoses among pregnant women. The greatest period of decline was from 2003 to 2007, where there was an estimated 3% decrease in prevalence per year. From 2007 to 2015, this lowered to an approximate 0.9% decrease in prevalence per year. Since 2015, there has been no evidence of an increasing or decreasing trend. The prevalence of new diagnoses has followed a similar pattern with a stable rate between 2013 and 2021.

Results for 2020 and 2021 summarised by HSE area

Results of the antenatal screening programme by HSE Area in Ireland, 2020*

HSE area	Uptake of test (%)	Prevalence (%)	Prevalence of new diagnoses (%)
East	100.0%	0.14	0.00
Midlands	100.0%	0.00	0.00
Midwest	100.0%	0.09	0.03
Northeast	100.0%	0.02	0.00
Northwest	100.0%	0.03	0.03
South	100.0%	0.18	0.00
Southeast	100.0%	0.07	0.00
West	99.9%	0.11	0.00
Total for Ireland	100.0%	0.11	0.01

Results of the antenatal screening programme by HSE Area in Ireland, 2021*

HSE area	Uptake of test (%)	Prevalence (%)	Prevalence of new diagnoses (%)
East	100.0%	0.15	0.01
Midlands	100.0%	0.03	0.00
Midwest	100.0%	0.09	0.00
Northeast	100.0%	0.05	0.00
Northwest	100.0%	0.00	0.00
South	100.0%	0.05	0.00
Southeast	100.0%	0.16	0.02
West	99.8%	0.11	0.02
Total for Ireland	100.0%	0.11	0.01

*See appendix 1 for HSE areas and corresponding hospitals

Summary



From 2003 to 2015, there was a statistically significant decline in the prevalence of HIV diagnoses (new and known) among pregnant women. Since 2015, the trend has remained stable. The prevalence of new diagnoses has followed a similar pattern with a stable rate since 2013.

In 2020 and 2021 there was a high uptake of HIV screening among pregnant women in Ireland. In addition, the number of pregnant women who were offered and accepted HIV antenatal screening was similar to numbers observed in 2019. This indicates that while many health services were impacted by the COVID-19 pandemic, maternity screening services continued.

HIV antenatal screening identifies women who would otherwise be unaware of their HIV status, thereby allowing treatment that is of direct clinical benefit to the individual and that can also prevent mother to child transmission, and transmission to sexual partners. It is also important for ensuring that those living with HIV are offered treatment and can achieve viral suppression.

Limitations of the data collected include (a) the lack of data on private patients from some hospitals, (b) lack of information systems in some hospitals requiring manual data retrieval, and (c) the use of aggregate data which limits the ability to analyse the data by different parameters

Technical Notes



Percent uptake is calculated as the number of women tested divided by the number of women booked, multiplied by 100.

Prevalence of HIV infection (%) is calculated as the number of women who tested positive divided by the number of women tested, multiplied by 100.

Prevalence of new diagnoses (%) is calculated as the number of women who tested newly HIV positive divided by the number of women tested, multiplied by 100.

Due to the cyber-attack on the HSE in 2021, data from some hospitals may be incomplete.

References

1. Townsend CL, Byrne L, Cortina-Borja M, Thorne C, de Ruiter A, Lyall H, Taylor GP, Peckham CS, Tookey PA. Earlier initiation of ART and further decline in mother-to-child HIV transmission rates, 2000-2011. *AIDS*. 2014 Apr 24;28(7):1049-57.
2. Helen Peters, Kate Francis, Rebecca Sconza, Anna Horn, Catherine S. Peckham, Pat A. Tookey, Claire Thorne; UK Mother-to-Child HIV Transmission Rates Continue to Decline: 2012–2014, *Clinical Infectious Diseases*, Volume 64, Issue 4, 15 February 2017, Pages 527–528

Appendix 1: Hospitals and data availability by HSE area



Hospital	Type of data provided in 2020 and 2021	HSE Area
Coombe Women's Hospital	Public and Private	East
Regional Hospital, Portlaoise	Public and Private	Midlands
Rotunda Hospital	Public and Private	East
Cavan and Monaghan Hospital	Public only	Northeast
Our Lady of Lourdes Hospital, Drogheda	Public and Private	Northeast
National Maternity Hospital, Holles St	Public and Private	East
Regional Hospital, Mullingar	Public and Private	Midlands
St Luke's Hospital, Kilkenny	Public and Private	Southeast
University Maternity Hospital, Limerick	Public only	Midwest
Cork University Maternity Hospital	Public and Private	South
University Hospital Kerry	Public and Private	South
South Tipperary Hospital, Clonmel	Public only	Southeast
University Hospital Waterford	Public only	Southeast
Wexford General Hospital	Public only	Southeast
Sligo University Hospital	Public and Private	Northwest
Mayo University Hospital	Public only	West
Portiuncula University Hospital	Public and Private	West
University Hospital Galway	Public only	West
Letterkenny University Hospital	Public and Private	Northwest