



Antenatal HIV Testing in Ireland, 2022

December 2023





Acknowledgments

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 2022, and to other staff in regional Departments of Public Health (Northwest) and Laboratories (Southeast) for collating their regional data.

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Key points

- Aggregate anonymised data on HIV antenatal testing in public patients were provided by all 19 maternity hospitals/units in 2022. Data on results in private patients were not provided by six hospitals
- The national reported uptake of HIV antenatal testing* in 2022 was 100%
- The positivity rate of HIV among pregnant women in 2022 was 0.10%
 - Since 2016, the positivity rate has been decreasing, continuing to remain low
- The positivity rate of newly diagnosed HIV among pregnant women in 2022 was 0.01%
 - Since 2016, the trend has remained low and stable



*calculated as the number of women who accepted testing as a proportion of the number of women who were offered testing.

Background

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

Diagnosis of HIV in pregnancy allows for effective interventions to be implemented and has dramatically reduced the risk of vertical 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 antenatal HIV 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.

This report describes antenatal HIV testing data in Ireland in 2022.

Further information can be found at <http://www.hpsc.ie/a-z/hivandaids/antenatalhivtesting/>

Data collection

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

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

Some hospitals provide data on public patients only.



HIV antenatal screening data, 2016 to 2022

Table 1. Summary of HIV antenatal screening, 2016 to 2022

	2016	2017	2018	2019	2020	2021	2022
Number of hospitals/units	16/19	18/19	18/19	19/19	19/19	19/19	19/19
Number of live births per year*	63,897	62,053	61,016	59,294	55,959	58,443	57,540
Number of women offered HIV test	56,865	62,720	58,354	58,343	58,706	57,281	53,983
Number of women tested	56,747	62,718	58,305	58,335	58,698	57,272	53,983
Uptake** of HIV antenatal test (%)	99.6	99.9	99.9	99.9	99.9	99.9	100.0
Total number HIV positive	83	82	97	80	66	62	54
Positivity rate – Total (%)	0.15	0.13	0.17	0.14	0.11	0.11	0.10
Number newly diagnosed HIV positive	10	11	14	9	3	5	8
Positivity rate – Newly diagnosed (%)	0.02	0.02	0.02	0.02	0.01	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 were not fully captured.



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

**Uptake was calculated as the number of women tested divided by the number of women who were offered testing, multiplied by 100. See technical notes for more details.



Trend in positivity rates of HIV in pregnant women

1) Total HIV diagnoses

- Since 2016, there has been a statistically significant decline in the positivity rate of HIV among pregnant women (including both known and new diagnoses).

2) Known HIV diagnoses

- Since 2016, there has been a statistically significant decline in the positivity rate of known HIV diagnoses among pregnant women.

3) New HIV diagnoses

- Since 2016, the positivity rate of new HIV diagnoses among pregnant women has remained low and stable.

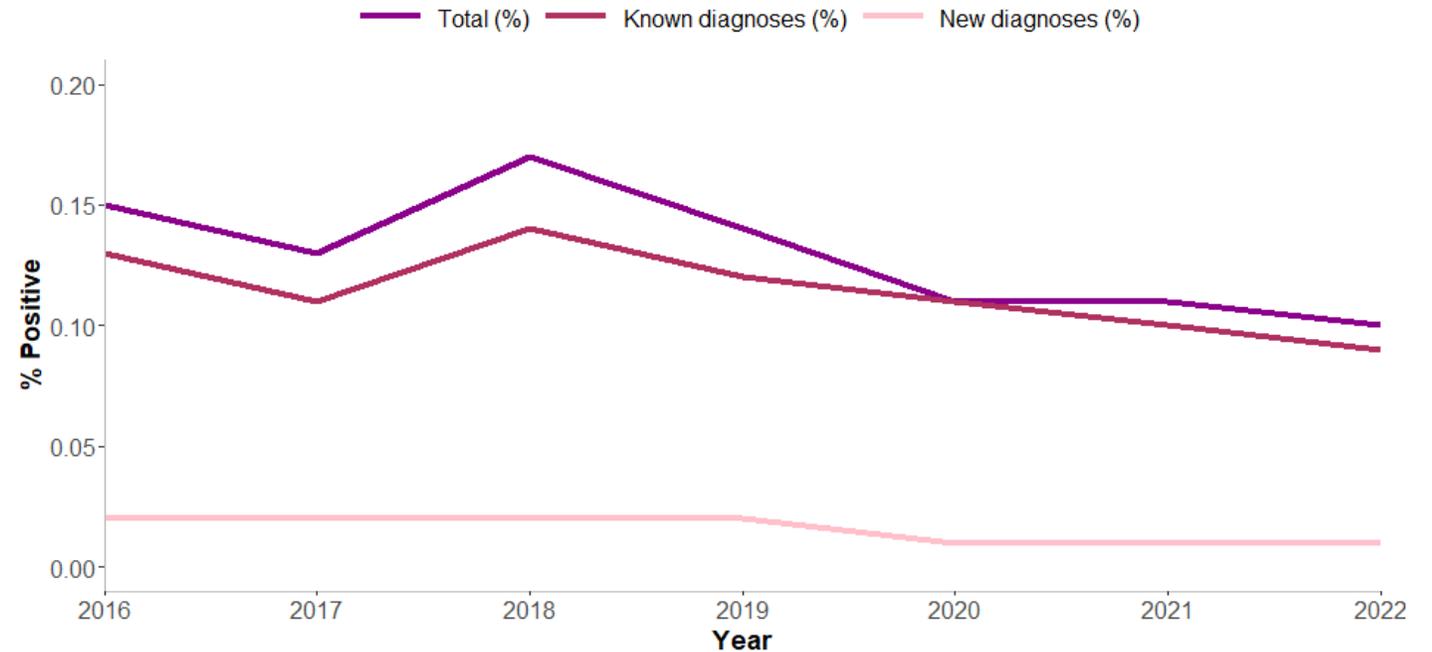


Figure 1. Trend in positivity rates of HIV in pregnant women, 2016 to 2022



Uptake of screening test and positivity rates of HIV among pregnant women by HSE area, 2022

Table 2. Uptake* of screening test and positivity rates of HIV among pregnant women, 2022**

HSE area	Uptake of test (%)	Positivity rate - Total (%)	Positivity rate - Newly diagnosed (%)
East	100.0	0.15	0.02
Midlands	100.0	0.03	0.00
Midwest	100.0	0.13	0.03
Northeast	100.0	0.02	0.00
Northwest	100.0	0.04	0.00
South	100.0	0.00	0.00
Southeast	100.0	0.17	0.04
West	100.0	0.08	0.00
Total for Ireland	100.0	0.10	0.01

- The positivity rate of HIV in 2022 was 0.10% and varied by HSE area (0% to 0.17%)
- The positivity rate of newly diagnosed HIV was 0.01% and varied by HSE area (0% to 0.04%)



*Uptake was calculated as the number of women tested divided by the number of women who were offered screening, multiplied by 100. See technical notes for more details.

**Data for 2022 were provided by all 19 maternity hospitals/units in Ireland. Data on private patients were not provided for six hospitals (see appendix 1 for details). The types of data sources used are provided in Appendix 2.

Limitations

Limitations of the data collected include

- Data on private patients from some hospitals not available
- Lack of information systems in some hospitals requiring manual data retrieval
- Use of aggregate data which limits the ability to analyse data by different parameters

Technical Notes

- Positivity rate of HIV (%) was calculated as the number of women who tested positive divided by the number of women tested, multiplied by 100.
- Positivity rate of newly diagnosed HIV (%) was calculated as the number of women who tested newly HIV positive divided by the number of women tested, multiplied by 100.
- Positivity rate of known HIV (%) was calculated the number of women who tested newly HIV positive subtracted from the overall number of women who tested positive divided by the number of women tested, multiplied by 100.
- Percent uptake was calculated as the number of women tested divided by the number of women who were offered screening, multiplied by 100. Please note that in previous years, the denominator used was number of women who were booked for screening. This change was implemented to address several issues related to booking data including: differences in booking systems between hospitals; inconsistent recording of private patient data; challenges related to the movement of patients between hospitals; and gaps in documenting pregnancy loss.

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

Hospital	Type of data provided in 2022	HSE Area
The Coombe Hospital	Public and Private	East
Rotunda Hospital	Public and Private	East
National Maternity Hospital, Holles St	Public and Private	East
Midland Regional Hospital Portlaoise	Public and Private	Midlands
Midland Regional Hospital Mullingar	Public and Private	Midlands
Cavan General Hospital	Public only	Northeast
Our Lady of Lourdes Hospital, Drogheda	Public and Private	Northeast
University Maternity Hospital Limerick	Public only	Midwest
Cork University Maternity Hospital	Public and Private	South
University Hospital Kerry	Public and Private	South
South Tipperary General Hospital	Public only	Southeast
University Hospital Waterford	Public only	Southeast
Wexford General Hospital	Public only	Southeast
St Luke's General Hospital, Kilkenny	Public and Private	Southeast
Sligo University Hospital	Public and Private	Northwest
Letterkenny University Hospital	Public and Private	Northwest
Mayo University Hospital	Public only	West
Portiuncula University Hospital	Public and Private	West
University Hospital Galway	Public and Private	West

HE Appendix 2

Data source within hospital*	Number of hospitals
Maternity unit IT system	8
Patient administration system	5
Maternity unit manual collection	4
Laboratory IT system	3
Other	1
Unknown	2



*Please note that more than one type of data source may be selected per hospital.



Appendix 3

Trend in HIV prevalence in pregnant women, 2003 to 2022

