

Annual Epidemiological Report

June 2022

Antenatal HIV Screening in Ireland, 2019

Key Facts

- The national reported uptake of HIV antenatal screening (from all 19 maternity hospitals/units) in 2019 was almost 100%.
- Eighty women tested HIV positive at their antenatal screen, giving a HIV prevalence of 0.14%, slightly lower than the prevalence in 2018 (0.17%). The prevalence of HIV among pregnant women varied by maternity hospital/unit, ranging from 0% to 0.39%
- Nine women were **newly** diagnosed with HIV at their antenatal screen. The prevalence of newly diagnosed HIV infection was 0.02%, which is the same as the rate in 2017 and 2018. The prevalence of new diagnoses among pregnant women varied by maternity hospital/unit, ranging from 0% to 0.09%

Suggested citation: HSE Health Protection Surveillance Centre. Antenatal HIV Screening in Ireland, 2019. Dublin: HSE HPSC; 2022

© HSE Health Protection Surveillance Centre, 2022. Reproduction is authorised, provided source is acknowledged

Background

The 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 HIV positive so they can be offered immediate treatment for their own clinical benefit, to prevent transmission of HIV to their child and to prevent transmission of HIV to their sexual partners.

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. A system for monitoring and evaluation of 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 2019. 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 collected annually from all maternity hospitals/units and are collated nationally by HPSC. Due to the COVID-19 pandemic, data collection for this report was paused in early 2020 and was resumed in early 2022. A copy of the HIV antenatal data collection form can be found at <http://www.hpsc.ie/a-z/hivandaids/antenatalhivtesting/>.

Results

Table 1 describes the results of the HIV antenatal screening programme from 2013 to 2019. Data for 2019 were provided by all 19 maternity hospitals/units in Ireland. Data on private patients were not provided for ten hospitals (see appendix 1 for details).

The national reported uptake of HIV antenatal screening (from all 19 maternity hospitals/units) in 2019 was almost 100%. The uptake by hospital ranged from 99.7% to 100%. There were 59,294 registered births in Ireland in 2019 but it is important to note that the antenatal screening data are based on date of antenatal screen rather than birth date.

Eighty women tested HIV positive at their antenatal screen in 2019, giving a HIV prevalence among pregnant women of 0.14%. This is a slight decrease compared to 2018 (0.17%). Prevalence varied by individual hospital, ranging from 0% to 0.39%.

Of the 80 women, nine were newly diagnosed at their antenatal screen (i.e. HIV positivity was not previously known), giving a prevalence of newly diagnosed HIV of 0.02%. This is very similar to the prevalence in recent years. Prevalence of newly diagnosed HIV varied by individual hospital, ranging from 0% to 0.09%.

Figure 1 shows the trend in national HIV prevalence and prevalence of new diagnoses among pregnant women from 2003 to 2019. Following a decline between 2003 and 2013, the prevalence of HIV among pregnant women has remained stable since 2013 (0.13% to 0.17%). The prevalence of new diagnoses has followed a similar pattern with a stable rate between 2013 and 2019 (0.01% to 0.02%).

The results for 2019 are summarised by HSE area in Table 2.

Table 1. Results of the HIV antenatal screening programme in Ireland, 2013 to 2019

	2013	2014	2015	2016	2017	2018	2019
Number of hospitals/units	16/19	17/20	18/19	16/19	18/19	18/19	19/19
Number of live births per year (from CSO)	68,930	67,462	65,909	63,897	62,053	61,016	59,294
Number of women booked	57,638	63,538	63,217	56,865	62,720	58,401	58,343
Number of women offered HIV test	57,638	63,532	63,217	56,865	62,720	58,354	58,343
Number of women tested	57,618	63,532	63,214	56,747	62,715	58,305	58,335
Uptake of HIV antenatal test (%)	99.9	99.9	99.9	99.8	99.9	99.8	99.9
Number HIV positive	83	93	84	83	82	97	80
Prevalence of HIV (%)	0.14	0.15	0.13	0.15	0.13	0.17	0.14
Number newly diagnosed HIV positive	14	11	9	10	11	14	9
Prevalence of new HIV diagnoses (%)	0.02	0.02	0.01	0.02	0.02	0.02	0.02

Figure 1. Prevalence of HIV among pregnant women and prevalence of new diagnoses among pregnant women in Ireland, 2003 to 2019

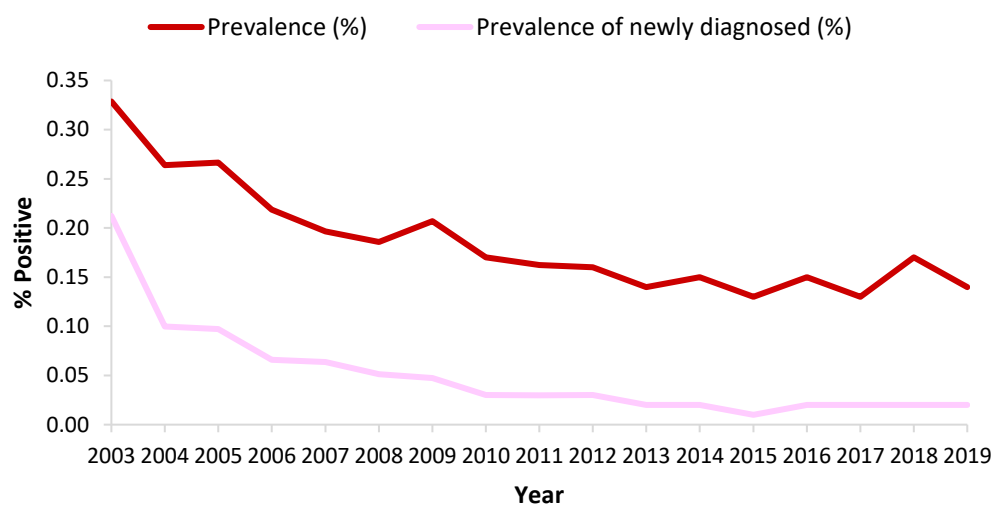


Table 2. Results of the antenatal screening programme by HSE Area in Ireland, 2019¹

HSE area	Uptake of test (%)	Prevalence (%)	Prevalence of new diagnoses (%)
East	100.0	0.18	0.03
Midlands	100.0	0.00	0.00
Midwest	100.0	0.06	0.00
Northeast	100.0	0.16	0.00
Northwest	100.0	0.04	0.00
South	100.0	0.23	0.02
Southeast	100.0	0.12	0.02
West	99.9	0.05	0.00
Total for Ireland	99.9	0.14	0.02

¹ See Appendix 1 for HSE areas and corresponding hospitals

Discussion

Data on the HIV antenatal screening programme for 2019 show a very high uptake of HIV screening among pregnant women in Ireland. The prevalence of HIV among pregnant women decreased in 2019 compared to 2018, although the decrease was not statistically significant. The prevalence of new diagnoses has remained stable since 2013. HIV antenatal screening remains a vital means of identifying women who would otherwise be unaware of their HIV status, thereby allowing treatment which is of direct clinical benefit to the individual and can also prevent mother to child transmission and transmission to sexual partners.

Limitations of the data collected include the lack of data on private patients from some hospitals.

Report prepared by

Mary Archibald, Kate O'Donnell and Natasha Rafter (on behalf of the HIV/STI Team)

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.

Acknowledgments

We would sincerely like to thank the staff in the maternity hospitals and maternity units for providing antenatal screening data for 2019 and to other staff in regional Departments of Public Health (Northwest) and Laboratories (Southeast) for collating their regional data.

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 by HSE area

Hospital	Type of data provided	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 only	Northeast
National Maternity Hospital, Holles St	Public and Private	East
Regional Hospital, Mullingar	Public and Private	Midlands
St Luke's Hospital, Kilkenny	Public only	Southeast
University Maternity Hospital, Limerick	Public only	Midwest
Cork University Maternity Hospital	Public only	South
University Hospital Kerry	Public only	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 and Private	West
Portiuncula University Hospital	Public and Private	West
University Hospital Galway	Public only	West
Letterkenny University Hospital	Public and Private	Northwest