Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

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HPSC

SYPHILIS IN IRELAND, 2014

Health Protection Surveillance Centre, www.hpsc.ie

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Acknowledgements

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This report prepared by Gillian Cullen and Dr Derval Igoe, November, 2015.

Suggested citation

HSE. Health Protection Surveillance Centre. Syphilis in Ireland, 2014. Dublin: Health Protection Surveillance Centre; 2015.

Contents

Key Points

- In 2014, the crude incidence rate of early infectious syphilis increased to 4.5 per 100,000, the highest rate since the syphilis outbreak among MSM in Dublin in 2001 (6.1/100,000).
- No congenital syphilis cases were notified in 2014.
- Stage of syphilis infection was available for 73% of cases in 2014 which met the laboratory criteria for the notification of early infectious syphilis. The data reported on early infectious syphilis may therefore not fully represent the total number of infectious cases.
- Focusing on early infectious syphilis:
    - Rates varied throughout the country, with the age-standardised incidence rate (9.0 per 100,000) in HSE East (Dublin, Kildare and Wicklow) twice the national rate (4.5 per 100,000) (figure 2).
    - The majority of cases occurred in males, with a male to female ratio of 15:1.
    - The majority of cases (84%) were reported in people over 25 years of age.
    - Almost three quarters of cases (73%) were identified in STI clinics, with 18% being diagnosed in general practice.
    - A rise in asymptomatic cases (59%) may have contributed to the rise in early infectious cases in 2014.
    - More than two thirds (69%) of all cases occurred in men who have sex with men (MSM), with rates highest in the 25 to 29 year age group. In MSM, a significant proportion (29%) was co-infected with HIV at the time of syphilis diagnosis, a small reduction compared to 2013 when 33% were co-infected.
    - Seventeen percent of cases were among heterosexuals. Eleven percent of heterosexuals were co-infected with HIV.
    - Three of the 13 female cases were pregnant at time of diagnosis.
    - A quarter of early cases were also diagnosed with an STI other than HIV during 2014. Since full patient identifiers were not provided for all cases, the true figure for STI co-infections is likely to be much higher.
- These data demonstrate that cases of infectious syphilis are concentrated in the MSM population, with evidence of ongoing unsafe behaviour in some of those affected. They also illustrate the need for targeted health promotion and primary prevention activities for MSM, and the importance of regular STI screening in this group. Sexual health information for MSM, including where to access free condoms and STI screening services, is available on www.man2man.ie.

Introduction

Syphilis is a sexually transmitted infection (STI) caused by the bacterium, *Treponema pallidum*. Despite availability of sensitive diagnostic tests and effective treatment, it remains a serious health problem. Syphilis has two routes of transmission; sexual transmission, which accounts for the vast majority of cases, and vertical transmission from mother to fetus in utero. Without treatment, infection will progress. Clinical symptoms may appear after an incubation period of 10 to 90 days (three weeks on average), at first a primary lesion at the site of infection (chancre), then a series of eruptions on mucous membranes and skin (secondary syphilis), followed by long periods of latency (latent or tertiary syphilis). The earlier an infection is diagnosed and treated, the greater the chance of preventing onward transmission. Early infectious syphilis relates to the following clinical stages; primary, secondary and early latent. It should be noted that many people with early infectious syphilis may be asymptomatic. Individuals with late latent syphilis or tertiary syphilis are not sexually infectious.

Information on syphilis notifications in 2015 can be found in the weekly HIV and STI reports at http://www.hpsc.ie/hpsc/A-Z/HIVSTIs/SexuallyTransmittedInfections/Publications/STIReports/STIWeeklyReports/.

Data Collection

As of 1st January, 2014, all laboratories are asked to notify new cases of syphilis, with one of: positive serology (*T. pallidum* EIA and TPPA) AND either RPR OR *T. pallidum* EIA IgM positive; demonstration of treponemes in lesions, exudates or tissues from clinically appropriate sites by dark ground microscopy; or demonstration of treponemes in lesions, exudates or tissues from clinically appropriate sites by PCR. Re-infections, as defined by the laboratory's own criteria, are also notifiable.

Clinical (enhanced) information was sought on all notified cases, including demographic information, stage of infection, HIV status and probable country of infection. If cases were subsequently reported by clinicians as late syphilis, syphilis of undetermined duration or had a history of treated syphilis, with no indication of current early syphilis infection, they were de-notified and were not included in this analysis. A copy of the syphilis data collection form used in 2014 is shown in Appendix 2 and the case definition is provided in Appendix 3.

Please note that information from previous years is updated on an ongoing basis in CIDR, and so information from previous years represents our current understanding and most up to date data as of 30th September, 2015, and may not correspond exactly with what was reported in previous annual reports. Similarly, data for 2014 may be updated further in due course and will be reported on in subsequent annual reports.

2014 Data

During 2014 279 cases of syphilis were notified in CIDR which met the criteria for laboratory diagnosis of early syphilis (data extracted 30th Sept., 2015). Of these, 205 (73%), where enhanced information was provided by clinicians, were reported as early infectious syphilis; 126 were primary, 39 secondary and 40 early latent. Two cases classified as secondary syphilis were reported as neurosyphilis. No congenital syphilis cases were notified in 2014.

Stage of infection was reported as unknown or enhanced surveillance forms were not received for the remaining 74 cases. A breakdown of forms returned by HSE area can be seen in Table A1 in Appendix 1. A third (n=23/74) of these cases without a stage of infection had a positive IgM result and so might be expected to be classified as early syphilis. The analysis focuses on cases fitting the laboratory criteria and clinical criteria and so the number of early cases in this report is likely to be an under-estimate of the true number of early infectious syphilis cases.

The crude incidence rate of early infectious syphilis increased by 13% in 2014 compared to 2013. Figure 1 shows the trend in crude incidence rate (CIR) for early syphilis cases from 2000 to 2014. Table 1 shows the breakdown of all notified cases of syphilis in 2014 by stage of infection and HSE area.

Figure 1: Crude incidence rate of early infectious syphilis (per 100,000 population), 2000-2014

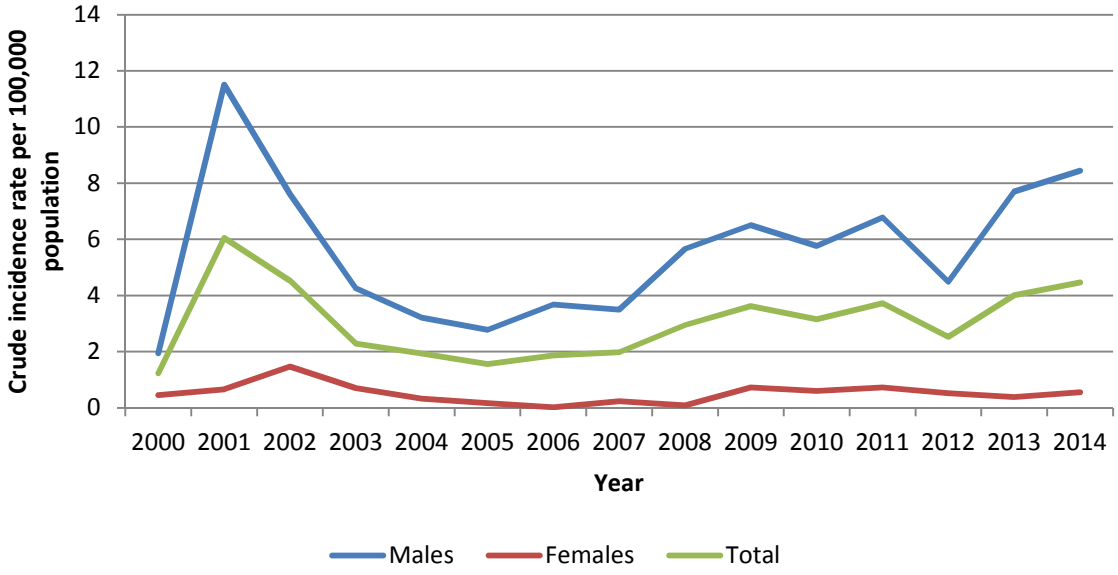


Table 1: Number of syphilis cases by HSE area and stage of infection, 2014

Stage of infection	East	Midlands	Midwest	Northeast	Northwest	Southeast	South	West	Total
Early syphilis	156	3	13	6	5	8	7	7	205
Stage unknown or form not returned	47	1	2	2	0	0	17	5	74
Total	203	4	15	8	5	8	24	12	279

Early Infectious Syphilis

As of 30th September, 2015, 205 cases of early infectious syphilis were notified in 2014, giving a crude incidence rate of 4.5 per 100,000 population (see figure 1 for trends). This compares to 184 early infectious cases in 2013 (CIR: 4.0 per 100,000) and 115 early infectious cases in 2012 (CIR: 2.5 per 100,000). Of the 205 early infectious cases notified in 2014, 126 (61%) were classified as primary syphilis, 39 (19%) as secondary syphilis and 40 (20%) as early latent.

A summary of early infectious syphilis cases diagnosed in 2012, 2013 and 2014 is shown in Table 2.

Table 2: Summary of trends in early infectious syphilis, 2012-2014

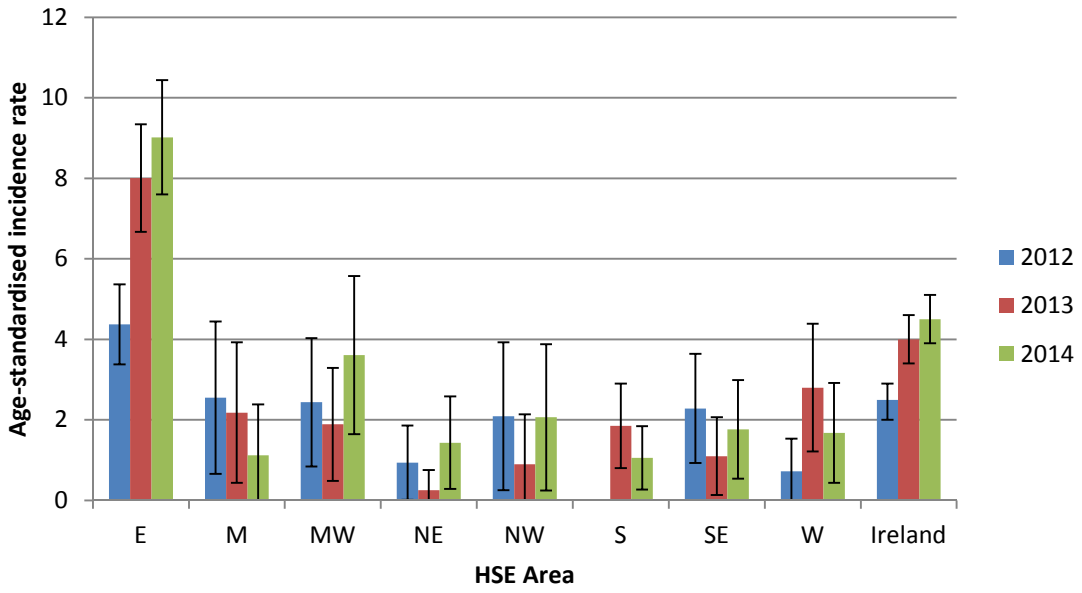
		2012	2013	2014
		n	n	n
Total number of early cases		115	184	205
Rate per 100,000 population		2.5	4	4.5
Stage of infection	Primary syphilis	62 (53.9%)	86 (46.7%)	126 (61.5%)
	Secondary syphilis	31 (27%)	52 (28.3%)	39 (19%)
	Early latent syphilis	22 (19.1%)	46 (25%)	40 (19.5%)
Gender	Males	101 (87.8%)	175 (95.1%)	192 (93.6%)
	Females	14	9	13
	Male to female ratio	7.2	19.4	14.8
Age	Median age (years)	34	33	32
	Age range (years)	19-68	19-73	19-70
Mode of transmission	Men who have sex with men (MSM)	81 (70.4%)	118 (64.1%)	141 (68.8%)
	Heterosexuals	24 (20.9%)	22 (12.0%)	35 (17.1%)
	Unknown	10 (8.7%)	44 (23.9%)	29 (14.1%)
Symptomatic	Yes	47	71	61
	% where known	44.8%	51.1%	33.7%
	No	58	68	120.0
	% where known	55.2%	48.9%	66.3%
Identified via contact tracing	Yes	0	2	15
	% where known	-	11.8%	8.8%
	No	0	15	156
	% where known	-	88.2%	91.2%
Reinfection	Yes	20	16	15
	% where known	29.4%	39.0%	65.2%
	Infection in last 2 years	10	10	12
	No	48	25	8
	% where known	70.6%	61%	34.8%
Syphilis in pregnancy	Diagnosed in pregnancy	3	1	3
	Rate per 1,000 births	0.04	0.01	0.04
Region of birth	Born in Ireland	85 (73.9%)	76 (41.3%)	100 (48.8%)
	Born abroad	23 (20%)	62 (33.6%)	77 (37.5%)
	Unknown	7 (6.1%)	46 (25%)	28 (13.7%)
Country of infection	Acquired in Ireland	72 (62.6%)	91 (49.5%)	110 (53.6%)
	Acquired abroad	15 (13%)	23 (12.5%)	45 (22%)
	Unknown	28 (24.4%)	70 (38%)	50 (24.4%)

HSE area

Cases of early infectious syphilis were reported from all HSE areas. Figure 2 shows the age-standardised incidence rate (ASIR) of early infectious syphilis by HSE area*. The ASIR in HSE East (9.0/100,000) was twice the national rate confirming that this region remains a centre of transmission within Ireland.

It is important to note that patient's area of residence was not provided for just over half of cases reported through CIDR. For laboratory notifications uploaded to CIDR, the location of the laboratory is used to assign area of residence where patient's details are not provided. As a result, the rates and numbers of cases by HSE area may reflect the location of STI services, including laboratories, as well as differences in reporting practices by clinics and clinicians from one area to another.

Figure 2: Age-standardised incidence rate of early infectious syphilis by HSE area, 2012-2014



Age and gender

There were 192 early infectious syphilis cases diagnosed in men and 13 in women, giving a male to female ratio of 15:1. The crude incidence rates in men and women were 8.4 and 0.6 per 100,000 population respectively (figure 1).

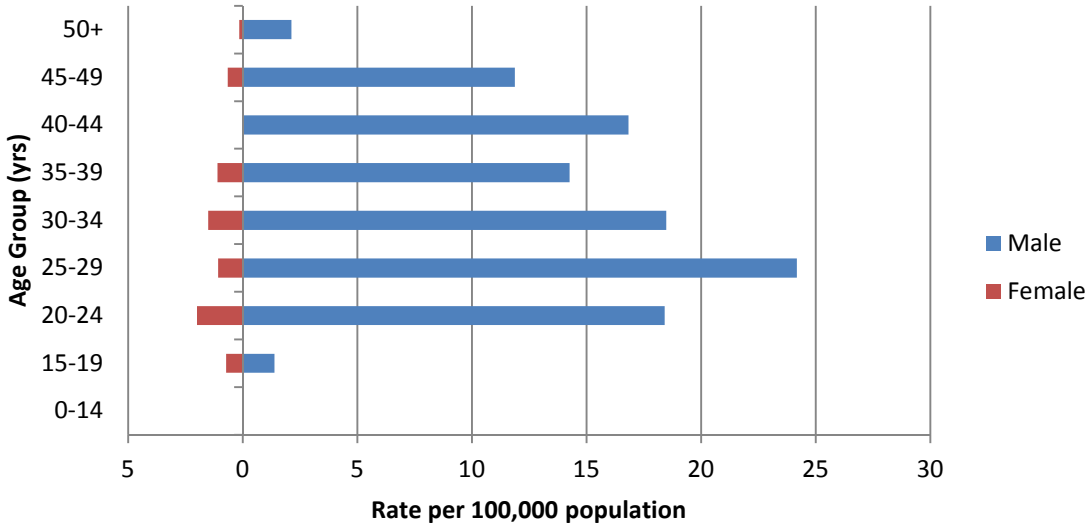
* See Technical Note for details of HSE areas and counties.

One sixth of the early infectious syphilis cases (16%) were reported in young people aged between 15 and 24 years, while the majority of cases (84%) were in people aged 25 years and older. The overall median age was 32 years (range: 19-70 years), 32 years in males (range: 19-70 years) and 30 years in females (range: 19-65 years).

The highest age specific rate in 2014 was in 25-29 year olds (12.2 per 100,000 population). The highest rate in males was in 25-29 year olds (24.2 per 100,000 population) followed by those aged 30-34 years and 20-24 years (18.5/100,000 and 18.4/100,00, respectively) and in females was in 20-24 year olds (2.0 per 100,000 population).

Figure 2 shows the notification rate per 100,000 population of early infectious syphilis cases by age group and gender in Ireland in 2014.

Figure3: Rate of early infectious syphilis (per 100,000 population) by gender and age group, 2014



Antenatal syphilis

Of the 13 women diagnosed with early infectious syphilis in 2014 three were pregnant at diagnosis giving a rate of 0.04 per 1,000 births, a reversal of the previous decreasing trend. Since 2011, the rate had decreased each year to 0.01 cases per 1,000 births in 2013.

Two cases were primary syphilis and the third was early latent syphilis. Two cases were identified in the first trimester through routine antenatal screening at booking visits. The third was identified in the second trimester through general practice. The outcome of these pregnancies was not available.

Transmission mode

Of the 205 early infectious syphilis cases in 2014, 141 (69%) were among MSM and 35 (17%) were among heterosexuals (11 female and 24 male). For 29 cases (14%), the mode of transmission was unknown. Figure 3 describes the early infectious syphilis cases by mode of transmission, gender and age group and Table 3 describes the early infectious cases by mode of transmission.

Figure 3: Early Syphilis cases by age group, gender and transmission mode where known, 2014 (n=176)

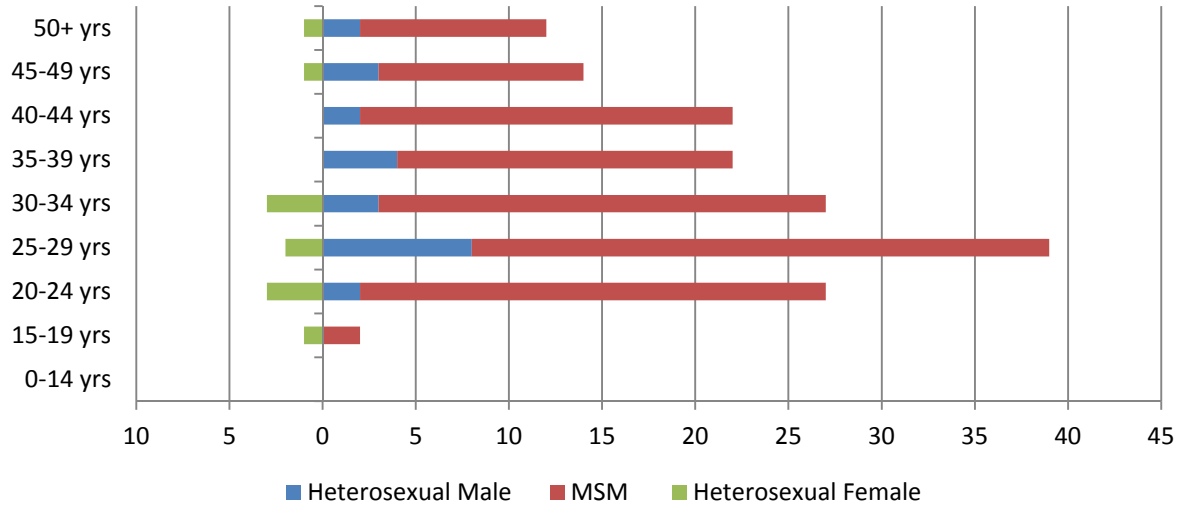


Table 3: Characteristics of early Infectious syphilis by mode of transmission where known, 2014 (n=176)

		MSM	Hetero
Total cases		141	35
Stage of infection	Primary	84 (59.6%)	19 (54.3%)
	Secondary	30 (21.3%)	5 (14.3%)
	Early latent	27 (19.1%)	11 (31.4%)
Age	Median age	32	30
	Age range	19 - 70 years	24-63 years (males) 19-65 years (females)
Country of birth	Born in Ireland	73 (51.8%)	17 (48.6%)
	Born abroad	55 (39.0%)	14 (40%)
	Unknown	13 (9.2%)	4 (11.4%)
Probable country of infection	Acquired in Ireland	82 (58.2%)	20 (57.1%)
	Acquired abroad	31 (22.0%)	10 (28.6%)
	Unknown	28 (19.9%)	5 (14.3%)
HIV status	HIV positive	41 (29.1%)	4 (11.4%)
	HIV negative	94 (66.7%)	29 (82.9%)
	Unknown	6 (4.3%)	2 (5.7%)

Country of birth/county of infection/ethnicity

Ireland was the most frequently reported country of birth (49%) among early infectious cases. Seventeen percent of cases were born in Latin America with 8% born in Western Europe and 3% born in Central and Eastern Europe. A breakdown by region of birth and mode of transmission can be seen in Table 4.

Fifty-four percent of early infectious syphilis cases acquired their infection in Ireland with 7% acquiring their infection in Western Europe. A breakdown by region where infection was acquired and mode of transmission can be seen in Table 5.

Fifty-three percent of cases were of white ethnic origin. Table 6 provides a breakdown of cases by ethnicity and mode of transmission.

Table 4: Early infectious syphilis cases by mode of transmission and region of birth, 2014

Region of birth	MSM		Heterosexual		Unknown		Total	
	N	%	N	%	N	%	N	%
Ireland	73	51.8	17	48.6	10	34.5	100	48.8
Western Europe	13	9.2	0	0.0	3	10.3	16	7.8
Central & Eastern Europe	5	3.5	1	2.9	0	0.0	6	2.9
Latin America	26	18.4	6	17.1	3	10.3	35	17.1
Other	11	7.8	7	20.0	2	6.9	20	9.8
Unknown	13	9.2	4	11.4	11	37.9	28	13.7
Total	**141**		**35**		**29**		**205**	

Table 5: Early infectious syphilis cases by mode of transmission and region of infection, 2013

Region of birth	MSM		Heterosexual		Unknown		Total	
	N	%	N	%	N	%	N	%
Ireland	82	58.2	20	57.1	8	27.6	110	53.7
Western Europe	12	8.5	1	2.9	1	3.4	14	6.8
Central & Eastern Europe	2	1.4		0.0		0.0	2	1.0
Latin America	8	5.7	4	11.4	2	6.9	14	6.8
Other	9	6.4	5	14.3	1	3.4	15	7.3
Unknown	28	19.9	5	14.3	17	58.6	50	24.4
Total	**141**		**35**		**29**		205	

Table 6: Early infectious syphilis cases by mode of transmission and ethnicity, 2014

	MSM		Heterosexual		Unknown		Total	
Ethnicity	N	%	N	%	N	%	N	%
White	78	55.3	18	51.4	12	41.4	108	52.7
Unknown	51	36.2	9	25.7	17	58.6	77	37.6
Other	8	5.7	3	8.6	0	0.0	11	5.4
Chinese	2	1.4	1	2.9	0	0.0	3	1.5
Indian subcontinent	2	1.4	1	2.9	0	0.0	3	1.5
Black African/Other	0	0.0	3	8.6	0	0.0	3	1.5
Total	**141**		**35**		**29**		**205**	

HIV co-infection

Twenty four percent (n=50) of early infectious syphilis cases diagnosed in 2014 were co-infected with HIV at the time of their diagnosis. A fifth of these (n=11) were diagnosed with HIV at the same time as they were diagnosed with early syphilis. Table 7 describes HIV status by mode of transmission.

The majority of HIV positive cases were in men (82%). A quarter of such cases were aged 30-34 years and 28% were aged 29 years or younger.

Eleven percent (n=4) of heterosexual cases were co-infected with HIV in 2014 compared with 18% in 2013. The percentage of cases among MSM who were co-infected with HIV in 2014 also decreased slightly (29% compared to 31% in 2013).

Information on re-infection was available for just five early cases syphilis cases among those who were HIV positive. Of these, four were classified as re-infections and one was not a re-infection.

Table 7: Early infectious syphilis cases by mode of transmission and HIV status, 2014

HIV Status	MSM		Heterosexual		Unknown		Total	
	n	%	n	%	n	%	n	%
Positive	41	29.1	4	11.4	5	17.2	50	24.4
Negative	94	66.7	29	82.9	11	37.9	134	65.4
Unknown	6	4.3	2	5.7	13	44.8	21	10.2
Total	**141**	**100.0**	**35**	**100.0**	**29**	**100.0**	**205**	**100.0**

Other STIs diagnosed in 2014

Since the start of 2013, case-based data on STIs (except ano-genital warts and non-specific urethritis) have been reported via CIDR from all HSE areas. This has enabled linkages to be made between different infections in a patient facilitating the reporting of multiple infections and providing a clearer understanding of the burden of STIs.

Among patients diagnosed with early infectious syphilis, there were also 51 cases of STIs other than HIV and one case of hepatitis C during 2014. Since full patient identifiers were not provided for all cases, the true figure is likely to be much higher. In addition, the large volume of notifications in HSE East and the use of more automated processes for processing notifications in CIDR which do not

allow for de-duplication of cases reported more than once, may have contributed to an under-estimate of cases of *Chlamydia trachomatis* in HSE East.

Table 8: Number* of early infectious syphilis cases diagnosed with another STI, Hepatitis C or HIV during 2014

Disease	No.
Chlamydia trachomatis infection	20
Gonorrhoea	22
Hepatitis C	1
Herpes simplex (genital)	3
Human immunodeficiency virus infection	13
Lymphogranuloma venereum	6

*patients may be counted more than once in this table

Service where syphilis first identified

Three quarters of cases were identified at a dedicated STI clinic and 18% were identified in general practice. Table 9 describes the service at which cases were first identified by mode of transmission. Seventy-eight percent of MSM were first identified at a dedicated STI service compared to 54% of heterosexuals while 26% of heterosexuals were identified in general practice compared to 16% among MSM.

Table 9: Early infectious syphilis cases by mode of transmission and service where syphilis first identified, 2014

Practice where syphilis first identified	MSM		Heterosexual		Unknown		Total	
	n	%	n	%	n	%	n	%
Antenatal	0	0.0	2	5.7	0	0.0	2	1.0
Dedicated STI clinic	110	78.0	19	54.3	20	69.0	149	72.7
Family Planning Clinic	0	0.0	1	2.9	0	0.0	1	0.5
General Practice	22	15.6	9	25.7	5	17.2	36	17.6
Infectious disease clinic	5	3.5	0	0.0	2	6.9	7	3.4
Other	3	2.1	2	5.7	0	0.0	5	2.4
Unknown	1	0.7	2	5.7	2	6.9	5	2.4
Total	**141**	**100**	**35**	**100**	**29**	**100**	**205**	**100**

Discussion

For the first time in 2014 only cases of early infectious syphilis were notifiable with the aim of improving completeness of information and data quality. An improvement was seen in that a higher proportion of enhanced forms were received (73% vs. 60% in 2013); this is very welcome. However, the true number of early infectious syphilis cases may be higher than that reported here, as only cases with both laboratory and clinical data indicating infectious syphilis, were included in the analysis.

In 2014, the crude incidence rate of early syphilis increased to 4.5 per 100,000, the highest rate since the syphilis outbreak among MSM in Dublin in 2001 (6.1/100,000). The increase in early syphilis in 2014 was concentrated among men (94% of cases). The rate among men increased to 8.4 per 100,000 compared to 4.5/100,000 and 7.7/100,000 in 2012 and 2013, respectively. The rate among women increased slightly in 2014 with a rate of 0.6 per 100,000 compared to 0.5/100,000 and 0.4/100,000 in 2012 and 2013, respectively. As in previous years, these data demonstrate that MSM are disproportionately affected by early infectious syphilis (80% of cases where mode of transmission was known). This mirrors the pattern seen in Europe and the United States (US).

The latest data from Public Health England show that there was a 46% increase in syphilis among MSM in 2014. Early syphilis diagnoses in England were almost exclusively in men (94%) and 81% were in MSM[1]. The overall crude incidence rate was 8.0 per 100,000 population; 15.3 per 100,000 and 1.0 per 100,000 in males and females, respectively[2]. Health Protection Scotland reported that in 2014 89% of syphilis cases were in males and 77% were in MSM[3].

The median age of early syphilis cases in 2014 was lower than in previous years (32 years vs. 33 years in 2013 and 34 in 2012) with more cases occurring among those aged 25-29 years (21% compared to 16% in 2013).

The proportion of asymptomatic cases increased in 2014 to 59% from 37% in 2013 and 50% in 2012. This indicates increased testing and may account for some of the increase seen in 2014.

The proportion of early syphilis cases co-infected with HIV in 2014 dropped back to 24% in 2014, the same proportion as 2012, having increased to 29% in 2013. The proportion of HIV co-infection continues to be higher among MSM (29%) compared to heterosexuals (11%). Those co-infected with HIV in 2014 were younger than in previous years; the median age of HIV positive cases was 38 years

in 2012, 36 years in 2013 and 34 years in 2014. The proportion of cases co-infected with HIV remains a concern as co-infection increases the risk of acquiring and transmitting HIV[4].

It is not possible to report here on the outcome for babies born to mothers diagnosed with early syphilis. Planned updates to the enhanced surveillance form will capture this data as well as information on maternal treatment in future years.

Targeted prevention services for MSM are needed to halt the rise in early infectious syphilis and reverse the trend of recent years. Behaviour change and increased testing and treatment remain the core actions in dealing with this increase.

Appendix 1: 2014 tables

Table A1: Return of enhanced forms by HSE area, 2013

HSE area	Total cases	Forms returned		Stage completed	
		N	%	N	%
East	203	148	72.9	156	76.8
Midlands	4	3	75	3	75
Midwest	15	14	93.3	13	86.7
Northeast	8	6	75.0	6	75.0
Northwest	5	5	100	5	100
Southeast	8	7	87.5	8	100
South	24	11	45.8	7	29.2
West	12	8	66.7	7	58.3
Total	**279**	**201**	72.0	**205**	73.5

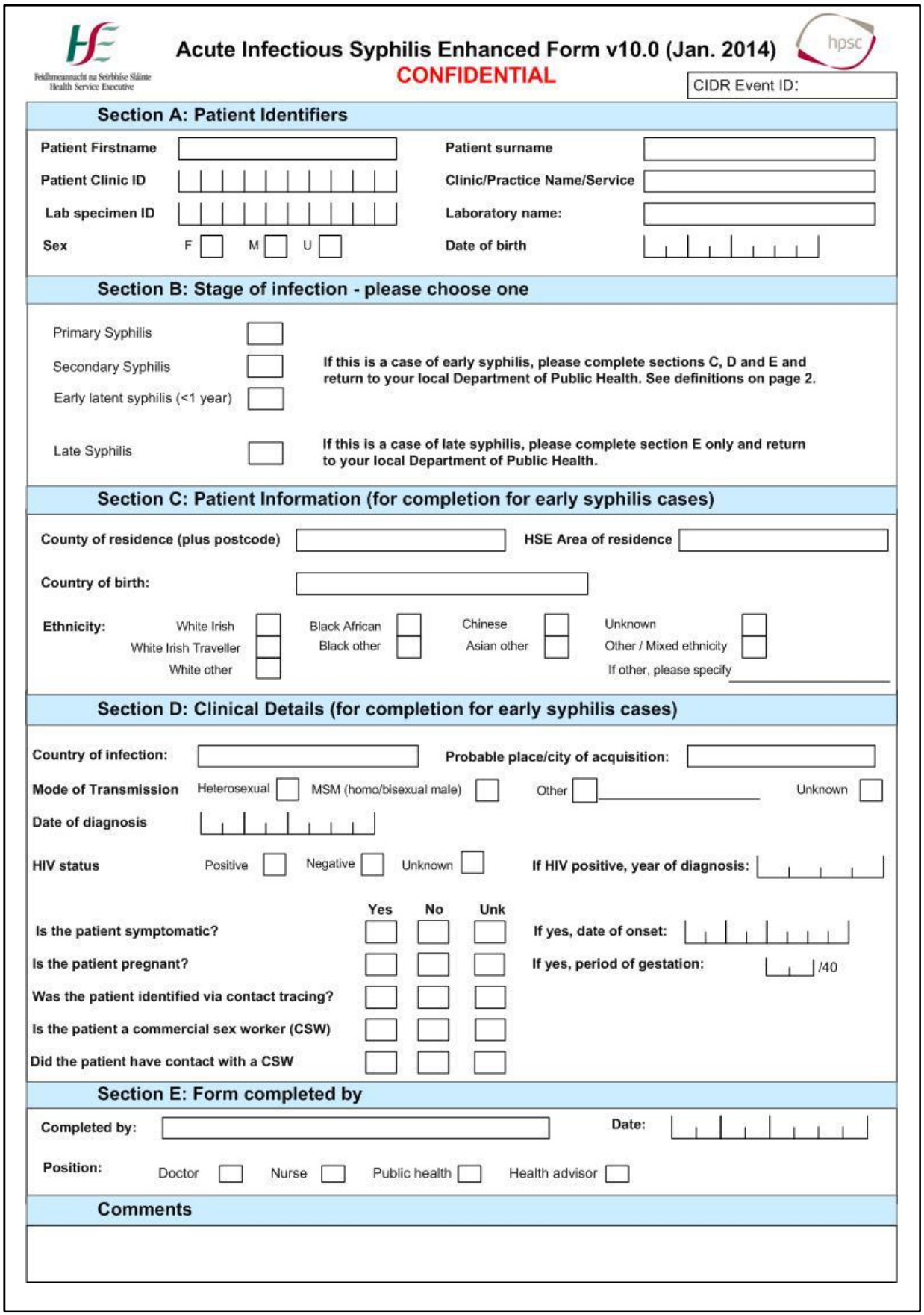
Table A2: Early infectious syphilis cases by age group and gender, 2014

Age group (years)	Male		Female		Total	
	n	%	n	%	n	%
0-14	0	0.0	0	0.0	0	0.0
15-19	2	1.0	1	7.7	3	1.5
20-24	27	14.1	3	23.1	30	14.6
25-29	42	21.9	2	15.4	44	21.5
30-34	36	18.8	3	23.1	39	19.0
35-39	26	13.5	2	15.4	28	13.7
40-44	28	14.6	0	0.0	28	13.7
45-49	18	9.4	1	7.7	19	9.3
50+	13	6.8	1	7.7	14	6.8
Unknown	0	0.0	0	0.0	0	0.0
Total	**192**	**100.0**	**13**	**100.0**	**205**	**100.0**

Table A3: Early infectious syphilis cases by mode of transmission and age group, 2014

Age group (years)	MSM		Heterosexual		Unknown		Total
	n	%	n	%	n	%	n
0-14	0	0.0	0	0.0	0	0.0	0
15-19	2	1.4	1	2.9	0	0.0	3
20-24	25	17.7	5	14.3	0	0.0	30
25-29	31	22.0	10	28.6	3	10.3	44
30-34	24	17.0	6	17.1	9	31.0	39
35-39	18	12.8	4	11.4	6	20.7	28
40-44	20	14.2	2	5.7	6	20.7	28
45-49	11	7.8	4	11.4	4	13.8	19
50+	10	7.1	3	8.6	1	3.4	14
Unknown	0	0.0	0	0.0	0	0.0	0
Total	**141**	**100.0**	**35**	**100.0**	**29**	**100.0**	**205**

Appendix 2: Syphilis enhanced surveillance form



Acute Infectious Syphilis Enhanced Form v10.0 (Jan. 2014)

CONFIDENTIAL

CIDR Event ID:

Section A: Patient Identifiers

Patient Firstname | Patient surname

Patient Clinic ID | Clinic/Practice Name/Service

Lab specimen ID | Laboratory name:

Sex F M U | Date of birth

Section B: Stage of infection - please choose one

Primary Syphilis

Secondary Syphilis

Early latent syphilis (<1 year)

If this is a case of early syphilis, please complete sections C, D and E and return to your local Department of Public Health. See definitions on page 2.

Late Syphilis

If this is a case of late syphilis, please complete section E only and return to your local Department of Public Health.

Section C: Patient Information (for completion for early syphilis cases)

County of residence (plus postcode) | HSE Area of residence

Country of birth:

Ethnicity: White Irish; White Irish Traveller; White other; Black African; Black other; Chinese; Asian other; Unknown; Other / Mixed ethnicity; If other, please specify

Section D: Clinical Details (for completion for early syphilis cases)

Country of infection: | Probable place/city of acquisition:

Mode of Transmission: Heterosexual; MSM (homo/bisexual male); Other; Unknown

Date of diagnosis

HIV status: Positive; Negative; Unknown | If HIV positive, year of diagnosis:

	Yes	No	Unk	
Is the patient symptomatic?				If yes, date of onset:
Is the patient pregnant?				If yes, period of gestation: /40
Was the patient identified via contact tracing?				
Is the patient a commercial sex worker (CSW)				
Did the patient have contact with a CSW				

Section E: Form completed by

Completed by: | Date:

Position: Doctor; Nurse; Public health; Health advisor

Comments

Definitions
Primary Syphilis: Any person with one or several (usually painless) chancres in the genital, perineal, anal area, or mouth, or pharyngeal mucosa, or elsewhere.
Secondary Syphilis: Any person with at least one of the following: - Diffuse maculo-papular rash often involving palms and soles - Generalised lymphadenopathy - Condyloma lata - Enanthema - Alopecia diffusa - Ocular manifestations of early syphilis - Neurological manifestations of early syphilis
Early latent syphilis (<1 year): Positive syphilis serology, no symptoms or signs of early syphilis and a negative reference syphilis screening test within previous 12 months.

Please return this completed form to your local Department of Public Health.
See www.hpsc.ie/hpsc/NotifiableDiseases/NotifyingInfectiousDiseases/ for names and contact details

A separate form is available from www.hpsc.ie for congenital cases

Appendix 3: Syphilis case definition, 2014

Syphilis

(*Treponema pallidum*)

Clinical criteria

A case may be asymptomatic or present with:

A. Primary syphilis

Any person with one or several (usually painless) chancres in the genital, perineal, anal area, or mouth, or pharyngeal mucosa, or elsewhere

B. Secondary syphilis

Any person with at least one of the following:

- Diffuse maculo-papular rash often involving palms and soles
- Generalised lymphadenopathy
- Condyloma lata
- Enanthema
- Alopecia diffusa
- Ocular manifestations of early syphilis
- Neurological manifestations of early syphilis

C. Early latent syphilis (<1 year)

- Positive syphilis serology, no symptoms or signs of early syphilis and a negative reference syphilis screening test within previous 12 months.

Laboratory criteria

At least one of the following laboratory tests:

- Demonstration of Treponema pallidum in appropriate lesions, exudates or tissues by dark-ground microscopic examination
- Demonstration of Treponema pallidum in appropriate lesions, exudates or tissues by PCR
- Detection of Treponema pallidum antibodies (total antibodies e.g. TPHA, TPPA , CIA, or EIA) and additionally detection of Tp-IgM antibodies (e.g. IgM ELISA or immunoblot or 19S-IgM-FTA-abs) or cardiolipin non-Tp IgM (e.g. RPR, VDRL)

Epidemiological criteria:

NA

Case classification:

Possible:

NA

Probable:

NA

Confirmed: Any person meeting the clinical criteria for early syphilis, who also meets the laboratory criteria for case confirmation

References

1. Public Health England. Sexually transmitted infections and chlamydia screening in England, 2014. *Health Protection Report Weekly Report*:9(22).
2. Public Health England. *Table 1: Selected STI diagnoses & rates, by gender, 2005-2014*. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436721/2014_Table_1_STI_diagnoses___rates_in_England_by_gender.pdf. Accessed on 7th October, 2015.
3. Potts A., Wallace L.A., Nicholson D., Goldberg D.J. Syphilis in Scotland 2014: update. *Health Protection Weekly Report* 2015:49(24).
4. Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. *Guidelines for the prevention & treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centres for Disease Control and prevention, the National Institutes of Health and the HIV Medicine Association of the Infectious Diseases Society of America*. Available at http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oi.pdf.
5. Health Ireland Survey 2015 Summary of Findings. The Stationary Office, Dublin; 2015.

Technical notes

1. Data are analysed by date of notification on CIDR.
2. Data for this report were extracted from CIDR 30th September, 2015, and were correct at the time of publication.
3. Percentages are rounded up in the text and are provided to one decimal place in the tables.
4. HSE areas in this repot refer to the following counties:

HSE Area	Counties
East	Dublin, Kildare & Wicklow
Midlands	Laois, Longford, Offaly & Westmeath
Midwest	Clare, Limerick & Tipperary N.R.
North East	Cavan, Louth, Meath & Monaghan
North West	Donegal, Leitrim & Sligo
South East	Carlow, Kilkenny, Tipperary SR, Waterford & Wexford
South	Cork & Kerry
West	Galway, Mayo & Roscommon

5. Age-standardised incidence rates were calculated using the direct method in which the national population was taken as the standard population. Population data were taken from Census 2011 from the Central Statistics Office. Data were aggregated into the following age groups for the analysis: 0-4 years, 5-9 years, 10-14 years, 15-19 years, 20-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years and ≥65 years.