

Report on Enhanced Surveillance of Syphilis in the ERHA 2000 to 2003

**Department of Public Health,
Dr. Steevens' Hospital
August 2004**



EASTERN REGIONAL HEALTH AUTHORITY
Údarás Sláinte Réigiúnach An Oirthir

A Report by Piaras O'Lorcain, Surveillance Scientist
& Margaret Fitzgerald, Specialist in Public Health Medicine

Summary Points

- An outbreak of syphilis in 2000 occurred among men who have sex with men in Dublin, peaking in 2001
- The outbreak has now entered an endemic phase
- There has been rise in infectious syphilis in the heterosexual community
- Cases of infectious and late syphilis cases in non-nationals especially from antenatal clinics have emerged
- There is a need for more information on congenital syphilis
- Enhanced surveillance allows information and trends to be monitored and supports intervention
- Continued enhanced surveillance is recommended

Introduction

Outbreaks of syphilis among men who have sex with men (MSM) have been reported across Europe and the US over the last few years. Since early 2000 there has been a dramatic increase in syphilis amongst MSM in Dublin.^{1, 2, 3} This was against a low incidence of syphilis throughout the 1990s, which in 1999 reached its lowest level in 10 years. In response to this increase in syphilis the Director of Public Health in the Eastern Regional Health Authority (ERHA) established an outbreak control team in October 2000.⁴ Interventions to control the outbreak were targeted primarily at MSM in Dublin. An enhanced surveillance system was introduced by both the ERHA and the NDSC to capture data on all syphilis cases from January 2000.

This report presents the epidemiology of all syphilis cases reported (including those based on clinical notifications) to the ERHA through the enhanced surveillance system between January 2000 and December 2003. All cases and stages of syphilis are detailed, with particular emphasis on the recent outbreak. Syphilis progresses in four stages: primary, secondary, latent (early and late) and tertiary. Early syphilis (primary, secondary and early latent) is infectious. Late syphilis (late latent and tertiary) is non-infectious.⁵

Materials and Methods

An enhanced surveillance system was implemented by the ERHA and the NDSC to capture data on all syphilis cases from January 2000. A copy of the current enhanced surveillance form is given Appendix 1. Demographics recorded on all cases included age, sex, country of birth, diagnosing clinic. Clinical details and at risk behaviour data were also collected. Details of the current definitions of syphilis conditions is given in Appendix 2.

Results

All syphilis cases (n=803)

Between January 2000 and December 2003, 803 cases of syphilis were notified to ERHA, of which 485 had enhanced surveillance forms (60.4%). A breakdown of the notifications by STI clinics, Antenatal clinics and GP practitioners is given in Table 1.

Table 1: Number of notified cases of syphilis in the ERHA by Reporting Clinic, 2000-2003

Reporting clinic	2000	2001	2002	2003	Total	% of Total
GUIDE Clinic	60	266	222	116	664	82.7%
Rotunda Hospital	8	4	0	29	41	5.1%
Private STD Clinic	6	14	8	7	35	4.4%
Mater Hospital	6	8	10	10	34	4.2%
Other GP Clinics	1	5	0	4	10	1.2%
Coombe Hospital	0	0	2	5	7	0.9%
St. James Hospital Laboratory	0	0	0	3	3	0.4%
Beaumont Hospital	0	2	1	0	3	0.4%
IBTS	0	2	0	0	2	0.2%
GMHP	1	0	0	0	1	0.1%
Unknown	1	2	0	0	3	0.4%
Total	83	303	243	174	803	100%

Of the 803 cases, 492 (61.3%) were early (infectious) syphilis, 240 (28.9%) were late syphilis and 70 (8.8%) were of an unknown or other syphilis stage. There was a 3:1 ratio between males and females and data on gender was incomplete for 1 case. Four hundred and sixty-three (57.7%) cases were amongst MSM (413 were homosexual and 50 were bisexual); 268 (33.4%) were amongst heterosexuals and sexual orientation was not recorded for 72 (9%) cases.

Thirty-seven syphilis cases were notified through the enhanced surveillance system in 2000, 197 in 2001, 167 in 2002 and 84 in 2003. The total number of syphilis cases peaked in Q2 2001 with 79 notifications (Figure 1).

Early (infectious) syphilis cases (n=492)

Four hundred and ninety-two early syphilis cases were notified to the ERHA between January 2000 and December 2003, peaking in July 2001 (Figure 2). Of these 188 (38.2%) were primary syphilis, 165 (33.5%) were secondary, 138 (28%) were early latent and 1 case (0.2%) was either a primary or a secondary stage case. 54.7% (269) of early syphilis cases were symptomatic, 25.6% (126) were asymptomatic; data was not recorded for 19.7% (97) cases. Four hundred and fifty-three (92.1%) cases were male, 39 (7.9%) were female. The mean age for male cases was 35.2 years (ranging from 18 to 67 years) and 28.8 years (ranging from 13 to 52 years) for female cases (figure 3).

Four hundred and four (82.1%) early syphilis cases were among MSM (72.8% were homosexual and 9.4% were bisexual), 82 (16.7%) were heterosexual and 6 (1.2%) were of unknown sexual orientation (Figure 2). Three hundred and forty-three (69.7%) early syphilis cases were born in Ireland (Table 2); of which 304 (88.6%) were MSM, 48 (11.1%) were heterosexual and 1 was of unknown sexual orientation.

Seventy-seven cases were not born in Ireland; 53 (68.8%) of these were MSM, 24 (31.2%) were heterosexual. Seventy-two early syphilis cases were of unknown nationality (14.6%).

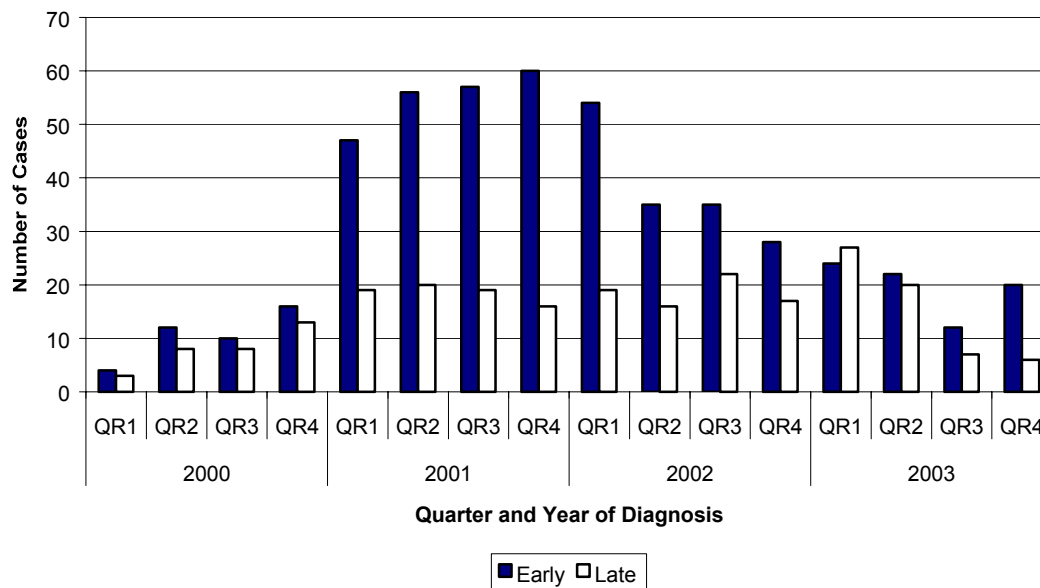


Figure 1: Number of early (infectious) and late (non-infectious) syphilis cases in ERHA by quarter and year of diagnosis January 2000 to December 2003 (n=732), (Cases by unknown diagnosis stage not shown).

Table 2: Percentage of total, early and late syphilis cases in Ireland by geographic origin (January 2000 to December 2003).

Geographic Origin	% Total (n=803)	% Early (n=492)	% Late (n=240)
Ireland	51.2%	69.7%	22.5%
West Europe (excl. Ireland)	57.9%	77.6%	27.1%
Sub-saharan Africa	7.1%	1.8%	19.2%
Eastern Europe	6.1%	2.0%	14.2%
Central Europe	2.0%	0.8%	4.6%
Other	3.7%	2.6%	5.8%
Unknown	23.2%	15.0%	29.2%

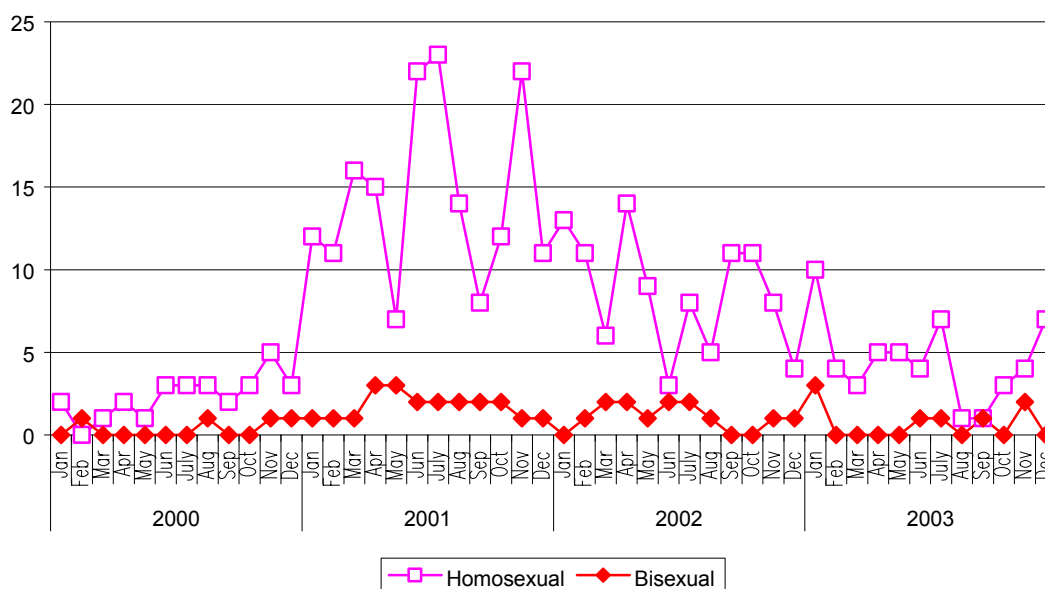


Figure 2: Early (infectious) syphilis cases by sexual orientation (homosexual and bisexual only) and month of diagnosis in ERHA, January 2000 to December 2003 (n=492) (Cases by unknown sexual orientation not shown).

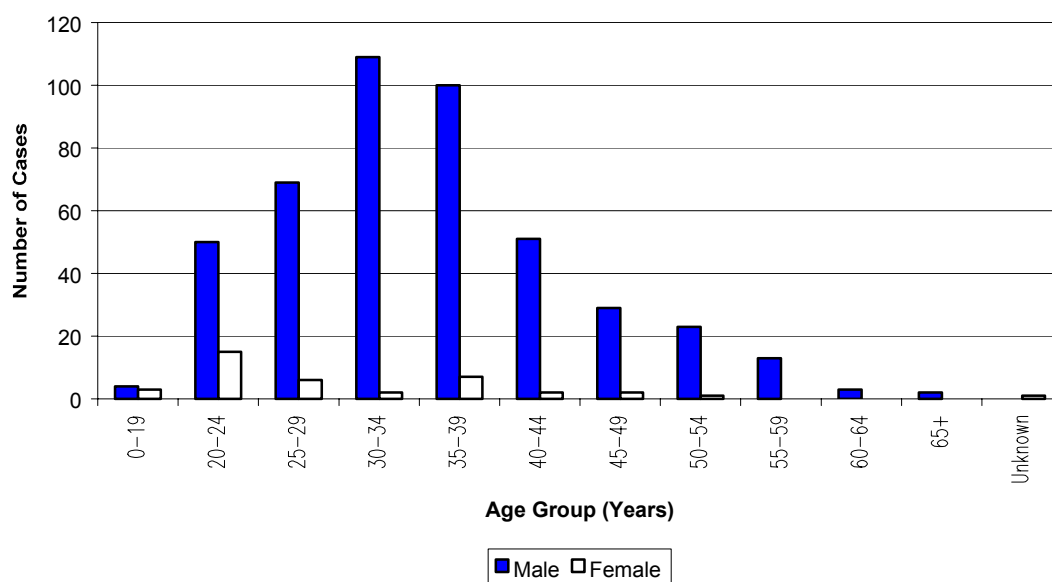


Figure 3: Early (infectious) syphilis cases in ERHA by age group (years) and gender, January 2000 to December 2003 (n=492).

HIV status & concurrent STIs

Eighty-eight (17.9%) early syphilis cases were HIV positive (87 male, 1 female). Eighty-five (96.6%) of these were MSM (76 homosexual and 9 bisexual) and 13 (3.4%) were heterosexual. HIV was newly diagnosed in 27 (30.7%) of the 88 HIV positive cases. Fourteen cases infected with HIV and infectious syphilis were co-infected with another STI. Seven cases were co-infected with syphilis, HIV and gonorrhoea.

Seventy-three (18.1%) early syphilis cases were concurrently infected with at least one other STI (excluding HIV). Eight (2%) early syphilis cases were concurrently infected with 2 or more STIs (excluding HIV). One hundred and forty-six (29.7%) early syphilis cases gave a history of having had an STI in the past, 91.8% of these cases were MSM.

Risk behaviour

Six early syphilis cases reported links to the commercial sex industry. Eight male cases reported sexual contact with male commercial sex workers (CSWs) and 5 male cases reported sexual contact with female CSWs in the past. In attempting to identify the source of infection numerous networks were associated with the increase in early syphilis cases: 191 cases attended saunas, 178 cases implicated bars or clubs, 34 made contact through internet chat rooms and 24 had sexual contact outdoors or parks. Seventy-one (14.4%) early syphilis cases had sex abroad in the three months prior to diagnosis (with London and Manchester commonly reported).

Information on sexual contacts in the previous three months of diagnosis was available for 77.2% of early syphilis cases notified between January 2000 and December 2003.

The median number of sexual contacts self-reported in the 3 months prior to diagnosis was one for male heterosexuals (range 0-8), one for female heterosexuals (range 0-3), 2 for male homosexuals (range 0-100) and 2 for male bisexuals (range 0-38).

Late syphilis cases (n=240)

Two hundred and thirty-eight late latent syphilis cases and 2 tertiary syphilis cases were notified to the ERHA between January 2000 and December 2003. Of these 46.3% (111) were male, 53.8% (129) were female. The mean age for male cases was 40.2 years (ranging from 20 to 87 years) and 31.2 years (ranging from 17 to 84 years) for female cases. One hundred and seventy-two (71.7%) of the late syphilis cases were heterosexual (65 male & 107 female), 44 (18.3%) were MSM and 24 (10%) were of unknown sexual orientation.

Ninety-two (47.5%) of the late syphilis cases were non-nationals (36 male and 78 female) and 54 (22.5%) were born in Ireland (Table 2). Of the 54 cases born in Ireland, 43 were male and 11 were female. Thirty of the Irish-born late syphilis cases were MSM and 24 were heterosexual. Eighty-five percent of the late syphilis cases in non-nationals were heterosexual and 5.3% were MSM and 9.6% were of unknown sexual orientation.

Table 3: Number of notified cases of syphilis in the ERHA by Year and Attendance Type, 2000-2003

Reason For Attendance	2000	2001	2002	2003	Total	% of Total
Self Referral (STI Clinic)	16	71	57	25	169	21.0%
Antenatal Referral	16	26	17	16	75	9.3%
Contact Referral	4	32	24	9	69	8.6%
GP Referral	6	17	16	9	48	6.0%
Hospital Referral	2	16	15	6	39	4.9%
Routine Visit (STI Clinic)	0	3	20	13	36	4.5%
Onsite Testing	0	26	5	4	35	4.4%
GMHP	6	17	4	0	27	3.4%
Other	0	8	13	8	29	3.5%
Unknown	33	87	72	84	276	34.4%
Total	83	303	243	174	803	100%

Antenatal Screening (n=75)

Seventy-five syphilis cases were identified through antenatal screening (Table 3). Fifty-five (73.3%) of these cases were late syphilis cases, 13 (17.3%) were early syphilis cases and 7 (9.3%) were of unknown syphilis stage. Self-referral was the commonest reason for early (infectious) syphilis cases attending STI clinics (Table 4). Sixty cases identified through antenatal screening were non-nationals, 4 were Irish and 17 were of unknown nationality. Four cases identified through antenatal screening were also HIV positive. Two congenital syphilis cases in infants have been reported to ERHA between January 2000 and December 2003.

Discussion

Two distinct groups have been associated with the increase in syphilis in the ERHA: (1) an outbreak of early (infectious) syphilis mainly among MSMs in Dublin and (2) late syphilis cases particularly among non-nationals. Changes in sexual behaviour patterns across Europe are reflected in the ERHA with large numbers of sexual contacts and the anonymous nature of contacts & other at risk behaviour.^{1, 6, 7} Other important trends associated with this outbreak include the numbers of newly diagnosed HIV cases and concurrent STI infections among early (infectious) syphilis cases and the reported congenital cases. It is notable that 20% of infectious syphilis cases in the ERHA reported sexual contact abroad, in particular in London, Manchester and Amsterdam, where syphilis outbreaks have also been reported. The syphilis outbreak in the ERHA peaked in July 2001 and there now remains a high level of syphilis endemicity.

Table 4: Number of notified cases of syphilis in the ERHA by Stage and Attendance Type, 2000-2003

Reason For Attendance	Early	Late	Unk.	Other	Total	% of Total
Self Referral (STI Clinic)	143	24	1	1	169	21.0%
Antenatal Referral	13	55	7	0	75	9.3%
Contact Referral	64	4	0	1	69	8.6%
GP Referral	41	5	1	1	48	6.0%
Hospital Referral	29	9	1	0	39	4.9%
Routine Visit (STI Clinic)	28	5	3	0	36	4.5%
Onsite Testing	30	5	0	0	35	4.4%
GMHP	25	2	0	0	27	3.4%
Other	24	2	3	0	29	3.5%
Unknown	95	129	49	3	276	34.4%
Total	492	240	65	6	803	100%

No true denominators exist for either the number of MSM or the seroprevalence of HIV among MSM in Ireland⁸. The absence of patient residence details means that no meaningful crude or age specific rates could be generated. Some under-reporting of cases and/or duplication of records are possible factors but the report probably accurately reflects the epidemic among MSM and HIV-infected individuals given that one of the notifying STI clinics in the ERHA is responsible for an estimated 80% of syphilis cases and newly diagnosed HIV-positive MSM in Ireland^{8, 9, 10}.

Intervention measures such as media campaigns, community education to promote the uptake of testing, outreach work by peer workers, contact tracing, serologic testing in venues where MSM meet their partners have proven effective for case finding in the context of this outbreak^{4, 8}. These measures may even have contributed to increased surveillance in 2000 and 2003. On-site testing in particular has accessed a population that may otherwise not have attended for screening. It has also provided publicity, increased awareness of the outbreak and knowledge about syphilis, and fostered trust between the gay and bisexual community and the health sector. The links developed in the course of the outbreak will provide the basis for collaboration on future sexual health projects.

Acknowledgements



The authors would like to thank Lisa Domegan, Mary Cronin (NDSC), Eilish Creamer, Margaret McIver (ERHA) and all those who provided data for this report, particularly the STI clinics/GPs and the syphilis outbreak control team.

References

1. Nicoll A, Hamers FF. Are trends in HIV, gonorrhoea and syphilis worsening in Western Europe? *BMJ* 2002; **324**: 1324-1327.
2. Doherty L, Fenton K, O'Flanagan D, Couturier E. Evidence of increased transmission of syphilis among homosexual men and heterosexual men and women in Europe. *Eurosurveillance Weekly*, [Serial online] 2000 [cited, 14 December 2000] **50**. Available at <http://www.eurosurv.org/200/001214.htm>
4. Hopkins, S., Coleman, C., Quinlan M. and Cronin M. Interventions in a syphilis outbreak. *Epi-insight*, August 2002; **3** (8). Available at http://www.ndsc.ie/epi_insight.htm
5. Holmes K, Sparling F, Mårdh P, Lemon S, Stamm W, Piot P, Wasserheit J. Sexually Transmitted Diseases. 1999. Third Edition.

6. Hopkins S, Lyons F, Mulcahy F, Bergin C. The great pretender returns to Dublin. *Sex Transm Inf* 2001; **77**:316-318.
7. Scheer S, Chu PL, Klausner JD, Katz MH, Schwarcz SK. Effect of highly active antiretroviral therapy on diagnoses of sexually transmitted diseases in people with AIDS. *Lancet* 2001; **357**: 432-435.
8. Hopkins S, Lyons F, Coleman C, Courtney G, Bergin C, Mulcahy F. Resurgence in infectious syphilis in Ireland: an epidemiological study. *Sex Transm Dis*. 2004; 31:317-21.
9. Domegan L., Jackson S, Cronin M. Report on Sexually Transmitted Infections Quarter 4 2001 and 2001 Annual Report. National Disease Surveillance Centre, 2003, Dublin , Ireland.
Available at <http://www.ndsc.ie/Publications/STIQuarterlyReports>.
10. HIV and AIDS statistics. Quarter 3 & 4 2002 and 2002 Annual Summary. National Disease Surveillance Centre, 2002, Dublin , Ireland.
Available at <http://www.ndsc.ie/Publications/HIVandAIDSReports>.

Appendix 1 Enhanced Surveillance Form for Syphilis Version 3.8 230304

 ERHA	Enhanced Surveillance Form for Syphilis in Ireland CONFIDENTIAL																																	
Clinic Number <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Reporting Clinic / Doctor <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																																		
Forename Initials <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Surname Initials <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																																		
DOB (dd/mm/yy) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Age <input type="text"/> <input type="text"/> <input type="text"/> Gender: Female <input type="checkbox"/> Male <input type="checkbox"/> Unknown <input type="checkbox"/>																																		
Country of Birth: Ireland <input type="checkbox"/> Other, please specify <input type="text"/> Unknown <input type="checkbox"/>																																		
Country of Residence: Ireland <input type="checkbox"/> Other, please specify <input type="text"/> Unknown <input type="checkbox"/>																																		
If Ireland is usual country of residence: County <input type="text"/> Health Board/Authority <input type="text"/> Unknown <input type="checkbox"/>																																		
Why did patient attend for consultation ? <i>Please tick the most relevant box</i> <table style="width: 100%;"> <tr> <td>Antenatal referral <input type="checkbox"/></td> <td>GP referral <input type="checkbox"/></td> <td>Self referral <input type="checkbox"/></td> </tr> <tr> <td>Contact referral <input type="checkbox"/></td> <td>Routine visit <input type="checkbox"/></td> <td>Unknown <input type="checkbox"/></td> </tr> <tr> <td>Hospital referral <input type="checkbox"/></td> <td colspan="2">Other, please specify <input type="text"/></td> </tr> </table>			Antenatal referral <input type="checkbox"/>	GP referral <input type="checkbox"/>	Self referral <input type="checkbox"/>	Contact referral <input type="checkbox"/>	Routine visit <input type="checkbox"/>	Unknown <input type="checkbox"/>	Hospital referral <input type="checkbox"/>	Other, please specify <input type="text"/>																								
Antenatal referral <input type="checkbox"/>	GP referral <input type="checkbox"/>	Self referral <input type="checkbox"/>																																
Contact referral <input type="checkbox"/>	Routine visit <input type="checkbox"/>	Unknown <input type="checkbox"/>																																
Hospital referral <input type="checkbox"/>	Other, please specify <input type="text"/>																																	
Clinical Diagnosis: <i>(Please see case definitions overleaf)</i> <table style="width: 100%;"> <tr> <td>Primary <input type="checkbox"/></td> <td>Secondary <input type="checkbox"/></td> <td>Latent (early or late)* <input type="checkbox"/></td> </tr> <tr> <td>Early latent <input type="checkbox"/></td> <td>Late latent <input type="checkbox"/></td> <td></td> </tr> <tr> <td>Congenital <input type="checkbox"/></td> <td>Tertiary <input type="checkbox"/></td> <td></td> </tr> </table> Case Classification Probable <input type="checkbox"/> Confirmed <input type="checkbox"/>			Primary <input type="checkbox"/>	Secondary <input type="checkbox"/>	Latent (early or late)* <input type="checkbox"/>	Early latent <input type="checkbox"/>	Late latent <input type="checkbox"/>		Congenital <input type="checkbox"/>	Tertiary <input type="checkbox"/>																								
Primary <input type="checkbox"/>	Secondary <input type="checkbox"/>	Latent (early or late)* <input type="checkbox"/>																																
Early latent <input type="checkbox"/>	Late latent <input type="checkbox"/>																																	
Congenital <input type="checkbox"/>	Tertiary <input type="checkbox"/>																																	
Confirmatory laboratory name <input type="text"/>																																		
Is this case infectious? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/>																																		
Date of Diagnosis (dd/mm/yy): <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																																		
<small>* For use when not possible to differentiate between early or late latency.</small>																																		
Syphilis Re-infection? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/>																																		
<table style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> <th style="text-align: center;">Unknown</th> </tr> </thead> <tbody> <tr> <td>Has the patient previously been tested for syphilis in the last 12 months?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Has the patient previously been tested for syphilis ever?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Has the patient previously been treated for syphilis in the last 12 months?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Has the patient previously been treated for syphilis ever?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Is the patient a contact of another syphilis case?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Is the patient symptomatic?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Is the patient pregnant?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>				Yes	No	Unknown	Has the patient previously been tested for syphilis in the last 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the patient previously been tested for syphilis ever?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the patient previously been treated for syphilis in the last 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the patient previously been treated for syphilis ever?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the patient a contact of another syphilis case?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the patient symptomatic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the patient pregnant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Yes	No	Unknown																															
Has the patient previously been tested for syphilis in the last 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Has the patient previously been tested for syphilis ever?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Has the patient previously been treated for syphilis in the last 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Has the patient previously been treated for syphilis ever?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Is the patient a contact of another syphilis case?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Is the patient symptomatic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
Is the patient pregnant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																															
<table style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> <th style="text-align: center;">Unknown</th> <th style="text-align: center;">Country</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td>Has the patient had a syphilis diagnosis abroad?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>Has the patient had syphilis treatment abroad?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> </tbody> </table>				Yes	No	Unknown	Country	Date	Has the patient had a syphilis diagnosis abroad?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	Has the patient had syphilis treatment abroad?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>														
	Yes	No	Unknown	Country	Date																													
Has the patient had a syphilis diagnosis abroad?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>																													
Has the patient had syphilis treatment abroad?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>																													

Concurrent STIs:	Positive	Negative	Unknown	Other concurrent STI (please specify)
Ano-genital warts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chlamydia trachomatis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Genital herpes simplex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gonorrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Infectious hepatitis B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Non-specific urethritis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Past history of STIs?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unknown <input type="checkbox"/>
------------------------------	------------------------------	-----------------------------	----------------------------------

HIV Status:	Positive <input type="checkbox"/>	Negative <input type="checkbox"/>	Unknown <input type="checkbox"/>	If HIV Positive Date of HIV diagnosis (dd/mm/yy) : <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>
--------------------	-----------------------------------	-----------------------------------	----------------------------------	---

Sexual orientation:	Heterosexual <input type="checkbox"/>	Bisexual <input type="checkbox"/>	Homosexual <input type="checkbox"/>	Unknown <input type="checkbox"/>
----------------------------	---------------------------------------	-----------------------------------	-------------------------------------	----------------------------------

Probable place of acquisition:	Country	City / County
12 months prior to diagnosis	<input style="width: 150px;" type="text"/>	<input style="width: 150px;" type="text"/>

Sexual Contacts	Male	Female
Approximate number of sexual contacts in 12 months prior to diagnosis	<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>	<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>

Probable mode of acquisition: <i>Please tick all that apply</i>	Yes	No	Unknown
Oral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vaginal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How was this infection acquired?	Heterosexual <input type="checkbox"/>	Homosexual <input type="checkbox"/>	Unknown <input type="checkbox"/>
---	---------------------------------------	-------------------------------------	----------------------------------

Comments:

Form Completed by: _____	Date of Completion <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>
Position: _____	

OBJECTIVES OF THE ENHANCED SYPHILIS SURVEILLANCE PROGRAMME:

- To monitor clusters, outbreaks and trends of syphilis infection over time.
- To identify groups to target for public health interventions.
- To determine the impact of syphilis infections on the transmission of HIV and other STIs.
- To disseminate syphilis surveillance data to those who need to know.

This form is to be completed by the appropriate clinician, nurse practitioner or health advisor on all cases of syphilis.

Please return all completed forms to your local Department of Public Health

Syphilis (primary, secondary, latent) (standard European Union (EU) definition)

(See also Syphilis (congenital and neonatal below))

Syphilis, primary

Clinical description

A stage of infection with *T. pallidum* characterised by one or more chancres (ulcers). Chancres might differ considerably in clinical appearance.

Laboratory criteria for diagnosis

One of the following:

- Detection of specific IgM by EIA
- Demonstration of *T. pallidum* in clinical specimens by darkfield microscopy, direct fluorescent antibody (DFA-TP), or equivalent methods

For probable case

A reactive serological test (nontreponemal: Venereal Disease Research Laboratory VDRL or rapid plasma reagin[RPR]; treponemal: fluorescent treponemal antibody absorbed [FTA-ABS] or microhaemagglutination assay for antibody to *T. pallidum* [MHA-TP]) or *Treponema pallidum* Phytahaemagglutination assay (TPPA)**.

Case classification

Possible: N/A

Probable: A clinically compatible case with one or more ulcers (chancres) consistent with primary syphilis and any reactive serologic test

Confirmed: A clinically compatible case that is laboratory confirmed

Syphilis, secondary

Clinical description

A stage of infection caused by *T. pallidum* and characterised by localised or diffuse mucocutaneous lesions, often with generalised lymphadenopathy. The primary chancre may still be present.

Laboratory criteria for diagnosis

Demonstration of *T. pallidum* in clinical specimens by darkfield microscopy, (DFA-TP), or equivalent methods

For probable case:

One of the following:

- A reactive serologic test (nontreponemal: Venereal Disease Research Laboratory [VDRL])

- Rapid plasma reagin [RPR]; treponemal: fluorescent treponemal antibody absorbed [FTA-ABS]
- Microhaemagglutination assay for antibody to *T. pallidum* [MHA-TP]
- *Treponema pallidum* phytohaemmagglutination assay (TPPA)**

** The TPPA test is not mentioned in the EU definition.

Case classification

Possible: N/A

Probable: A clinically compatible case with any reactive serologic test

Confirmed: A clinically compatible case that is laboratory confirmed

Syphilis, latent

Clinical description

A stage of infection caused by *T. pallidum* in which organisms persist in the body of the infected person without causing symptoms or signs.

Laboratory criteria for diagnosis

Demonstration of a positive reaction with a specific EIA but negative for laboratory test for infectious syphilis (see primary or secondary syphilis)

Case classification

Possible: N/A

Probable: No clinical signs or symptoms of syphilis and a positive laboratory test as above

Confirmed: N/A

Syphilis (congenital and neonatal)

Clinical description

A condition caused by infection in utero with *T. pallidum*. A wide spectrum of severity exists, and only severe cases are clinically apparent at birth. An infant or child (aged <2 years) may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, jaundice (nonviral hepatitis), pseudoparalysis, anemia, or edema (nephrotic syndrome and/or malnutrition). An older child may have stigmata (e.g., interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).

Laboratory criteria for diagnosis

Demonstration of *T. pallidum* by darkfield microscopy, fluorescent antibody, or other specific stains in specimens from lesions, placenta, umbilical cord, or autopsy material

Case classification

Probable: a condition affecting an infant whose mother had untreated or inadequately treated syphilis at delivery, regardless of signs in the infant, or an infant or child who has a reactive treponemal test for syphilis and any one of the following:

- Any evidence of congenital syphilis on physical examination
- Any evidence of congenital syphilis on radiographs of long bones
- A reactive cerebrospinal fluid (CSF) venereal disease research laboratory (VDRL)
- An elevated CSF cell count or protein (without other cause)
- A reactive fluorescent treponemal antibody absorbed—19S-IgM antibody test or IgM enzyme-linked immunosorbent assay

Confirmed: A case that is laboratory confirmed