

Surveillance report.

HIV infection in Scotland: Quarterly report to 31 December 2017

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Diagnosed HIV-infected persons living in Scotland	Number of HIV-infected persons attending for care and treatment	Proportion of attenders on treatment
5099	4631	98%

During 2017, NHS Scotland laboratories reported positive HIV-antibody test results for 361 individuals not previously recorded as HIV-positive. The cumulative total of known HIV-positive individuals ever reported in Scotland is now 9043, of whom 6640 (73%) are male and 2403 (27%) are female. In discussion with the HIV Clinical Leads Group, there have been recent changes in the definition of those not attending and/or lost to follow up. Thus, the estimated numbers of people diagnosed and living with HIV in Scotland have been updated in this report. Allowing for known and presumed migration of infected persons, and for the 2117 (23%) known to have died, it is estimated that there are currently 5099 persons living in Scotland who have been diagnosed HIV-positive.

Of the 361 HIV-positive individuals reported in 2017, 271 (75%) are male, and 206 (57%) are aged between 25 and 44 years. Greater Glasgow & Clyde reported 129 diagnoses, 99 were reported from Lothian, 36 from Lanarkshire, 33 from Grampian and 22 from Tayside. The probable route of transmission was men who have sex with men (MSM) in 147 individuals, heterosexual intercourse in 83, and injecting drug use in 40. Transmission category remains unresolved for 85 individuals. A total of 171 infections (47%) are presently presumed to have been acquired outwith Scotland.

As at 30 September 2017, 4631 HIV infected individuals were attending specialist services for monitoring and treatment. Including recently reported persons (139 – Table 5) who may not as yet have recorded an attendance, this represents 94% of the estimated number of diagnosed individuals currently living in Scotland. Across Scotland, 98% of persons attending for monitoring are receiving anti-retroviral therapy.

Two new tables (Tables 6 and 7) are included in this issue of the HIV Quarterly Report. These show new HIV diagnoses among individuals who are presumed to have been exposed/infected in Scotland, broken down by exposure category, NHS board and year of report. The new HIV diagnoses make up a proportion (nominally two thirds) of the total number of reports received each year at HPS. These data represent those diagnosed for the first time in Scotland and the trend in these numbers provide a clearer indication of the epidemiology of HIV infection in Scotland. Notably, the decrease in reports among MSM in 2016 is the result of a decrease

in the number of new, first time diagnoses in Scotland. In 2017, in similar number of new infections among MSM is indicated. However, as some aspects of the enhanced surveillance are still under review, the 2017 data may change.

More detailed information is included in the following tables. The HIV diagnosis database is under continual review and modification as additional information becomes available. This may result in apparent discrepancies when current and previously published tables are compared.

HPS would welcome comment and suggestions from stakeholders regarding content. Please direct any correspondence to Glenn Codere, BBV/STI Information Manager, HPS (email g.codere@nhs.net, tel 0141 300 1146).

TABLE 1: HIV-1 infected persons, Scotland, by NHS board and date reported; January to December 2017.

NHS board	Male	Female	Total
Ayrshire & Arran	8	0	8
Borders	*	0	*
Dumfries & Galloway	*	*	*
Fife	*	*	15
Forth Valley	*	*	*
Grampian	28	5	33
Greater Glasgow & Clyde	89	40	129
Highland	5	5	10
Lanarkshire	25	11	36
Lothian	84	15	99
Orkney	0	0	0
Shetland	0	0	0
Tayside	13	9	22
Western Isles	0	0	0
Total	271	90	361

TABLE 2: HIV reports, Scotland¹ by year of report, exposure category and presumed area of exposure²; to 31 December 2017.

Year of report	All risks ³				Men who have sex with men (MSM)				Sexual intercourse between men and women				PWID	Age group ⁴ 15-24
	Total ⁵	within Scotland	outwith Scotland	outwith UK	Total ⁵	within Scotland	outwith Scotland	outwith UK	Total ⁵	within Scotland	outwith Scotland	outwith UK		
2003	257	104	148	124	101	62	39	20	134	33	100	97	11	38
2004	359	141	217	188	141	98	43	21	195	30	165	159	15	51
2005	404	149	255	207	172	106	66	35	197	27	170	160	27	48
2006	340	122	216	175	149	87	62	29	162	21	139	134	22	33
2007	440	153	283	224	203	115	88	40	219	35	182	172	10	64
2008	405	149	250	202	162	98	64	28	206	37	168	161	21	29
2009	417	141	272	221	175	98	77	41	208	35	173	159	18	33
2010	359	149	209	172	162	108	54	29	167	24	143	134	21	35
2011	364	162	199	142	174	112	62	28	161	39	122	101	19	31
2012	347	125	216	159	172	94	78	39	144	21	123	107	16	33
2013	354	142	205	150	179	99	80	38	143	28	113	101	21	25
2014	370	155	209	139	185	99	86	33	149	36	112	98	22	31
2015	366	186	170	119	185	112	73	30	112	21	88	81	56	32
2016	316	133	159	110	146	67	79	41	109	33	74	65	38	19
2017	361	132	142	110	147	77	70	45	83	18	62	58	40	28

1. Due to active follow-up, data on the Scottish HIV diagnosis database is constantly changing. Figures presented in this table may differ slightly from those previously published.
2. 'Presumed Area of Exposure' is based on information provided by the patient at the time of test or during subsequent follow-up. An individual is presumed to have been infected in Scotland if, after investigation, no evidence exists to the contrary. 'Outwith UK' is a subset of 'outwith Scotland'. Cases under investigation are excluded from all categories except the total.
3. Includes persons outwith three main risk groups.
4. Age at time of first positive specimen.
5. Includes cases currently under investigation.

TABLE 3: HIV reports, Scotland by year of report and NHS board¹; to 31 December 2017.

Year of report	AA	BR	DG	FF	FV	GR	GGC	HG	LN	LO	TY	SH, OR, WI
2003	*	*	*	11	*	23	88	7	22	80	14	0
2004	8	*	9	21	6	25	116	7	26	111	26	0
2005	12	*	13	18	15	33	123	9	33	130	15	0
2006	10	*	12	11	14	24	106	6	31	95	25	*
2007	9	*	9	20	16	47	133	17	45	111	30	*
2008	8	*	*	11	16	43	137	10	29	111	30	*
2009	10	5	5	18	17	35	185	12	33	73	23	*
2010	16	6	6	10	11	37	113	14	28	90	27	*
2011	14	*	*	18	14	31	111	15	27	97	31	*
2012	10	*	5	15	10	43	115	12	27	88	20	0
2013	18	*	5	11	15	45	102	*	29	89	30	*
2014	15	*	6	13	9	33	124	16	36	94	21	0
2015	13	7	6	18	10	31	133	14	40	69	24	*
2016	5	*	*	14	12	34	110	11	35	71	17	*
2017	8	*	*	15	*	33	129	10	36	99	22	0

1. See terms and definitions.

TABLE 4: Monitoring and deaths among individuals diagnosed with HIV, Scotland; to 31 December 2017.

Year of attendance/death	Individuals attending for CD4/VL monitoring¹	Deaths among HIV diagnosed individuals²
2003	1675	63
2004	1923	29
2005	2204	52
2006	2402	47
2007	2661	48
2008	2869	49
2009	3094	50
2010	3345	49
2011	3580	43
2012	3772	44
2013	3930	49
2014	4145	49
2015	4297	46
2016	4437	59
2017	4450	29

1. Total individuals attending for monitoring within given calendar year. This does not equate to the total number considered to be currently attending, which is defined under 'Terms and definitions'. Data are subject to a three-month reporting delay.
2. In some cases the actual cause of death may have been unrelated to the person's infection status. Death data are subject to reporting delay.

TABLE 5: New HIV reports and current status of living diagnosed persons; to 31 December 2017.

NHS board	Reported during year to date as 31 Dec 2017					Current status of living diagnosed persons					
	Total	MSM	Heterosexual	PWID	Other/NK	Estimated ¹ diagnosed individuals alive as at 31 Dec 2017	Number attending ² for monitoring	Recent report ³	Proportion of Dx individuals attending or recently reported	Proportion of attenders on treatment at any level	Not attending (and number last identified prior to 1 Oct 2007)
AA	8	*	0	*	*	151	135	*	91%	97%	17 (5)
BR	*	*	0	0	*	47	39	*	91%	92%	* *
DG	*	*	0	0	*	76	64	*	86%	97%	16 (5)
FF	15	5	0	0	10	238	211	*	90%	98%	37 (14)
FV	*	*	*	0	0	156	146	*	94%	96%	23 (16)
GR ⁴	33	*	13	*	11	409	364	11	92%	98%	34 *
GGC	129	38	39	36	16	1595	1432	55	93%	97%	166 (62)
HG	10	*	*	0	6	142	128	5	94%	97%	15 (7)
LN	36	16	11	*	*	437	395	13	93%	97%	40 (13)
LO	99	70	12	0	17	1465	1366	27	95%	98%	156 (86)
TY	22	*	*	0	19	368	338	14	96%	98%	40 (25)
OR, SH, WI	0	0	0	0	0	15	13	*	93%	100%	* (0)
Total	361	147	83	40	91	5099	4631	139	94%	98%	552 (237)

1. This estimate is calculated by subtracting the individuals known to have died, those who are known or presumed to have left Scotland, and those who have failed to attend for 10+ years from the cumulative number of diagnosed cases ever recorded.
2. Individuals alive, not known to have left Scotland, and recording at least one attendance within the previous 18 months as at 30 September 2017.
3. Individuals reported within the past 18 months who have not yet attended for monitoring at a specialist clinic.

TABLE 6: Newly diagnosed¹ HIV infections in Scotland by year of report² and exposure category; 2008-2017.

Exposure category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Men who have sex with men (MSM)	120	132	130	138	128	124	118	131	80	88
Sexual intercourse between men and women	145	139	117	113	91	102	87	62	70	52
People who inject drugs (PWID)	13	12	17	14	12	17	18	52	31	35
Other	9	*	*	*	*	*	*	*	*	*
Not Known	5	*	*	*	*	*	*	*	*	*
Scotland	292	291	268	270	238	250	230	253	201	235

1. Excludes individuals with evidence of a previous diagnosis outwith Scotland.
2. Figures presented – particularly those from recent years – are subject to change due to active follow-up of individuals with missing epidemiological information.

TABLE 7: Newly diagnosed¹ HIV infections in Scotland by year of report and NHS board; 2008-2017.

NHS board	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ayrshire & Arran	*	7	12	12	9	16	13	12	*	7
Borders	*	*	*	*	*	*	*	*	*	*
Dumfries & Galloway	*	5	*	*	*	*	*	*	*	*
Fife	9	15	9	17	9	*	8	12	8	10
Forth Valley	12	12	10	12	6	12	8	7	12	*
Grampian	35	22	22	19	22	35	19	17	24	22
Greater Glasgow & Clyde	103	125	96	92	88	81	75	97	78	93
Highland	*	8	9	8	9	*	9	9	5	9
Lanarkshire	19	24	21	25	19	28	21	28	25	27
Lothian	73	52	60	60	55	44	59	47	32	49
Tayside	26	19	23	21	14	22	12	16	9	12
Orkney/Shetland/ Western Isles	*	*	0	0	0	*	0	*	0	0
Scotland	292	291	268	270	238	250	230	253	201	235

1. Excludes individuals with evidence of a previous diagnosis outwith Scotland.

Acknowledgements

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Terms and definitions

Attending/Attendees: Individuals are considered to be 'Attending' if they have recorded at least one visit to a specialist HIV clinic for monitoring and/or care within the most recent 18-month period.

Not Attending: The category refers specifically to an individual's non-attendance for specialist HIV care and treatment. Individuals are considered to be 'Not Attending' if:

- a) they have not recorded an attendance at a specialist HIV clinic within the previous 18 months; and
- b) no evidence exists that the patient is deceased or has left Scotland.

Although not presented in this report, patients in the 'Not Attending' category can be further subdivided into those who are currently known to be alive and living in Scotland or known to have attended a non-HIV related NHS facility within the past 18 months, those who have been assigned a Community Health Index (CHI) number indicative of registration with a GP, and those who have not been assigned a CHI number.

NHS board: Unless otherwise specified, individuals are assigned to a specific NHS board based on the patient's postcode of residence or, where this is not known, their NHS board of referral.

Data suppression: In order to maintain patient confidentiality, cells with less than five cases (and those derived from them) are suppressed. These cells are indicated with an asterisk (*). To prevent back-calculation of suppressed cells from totals, it may sometimes be necessary to also suppress some cells with greater than five cases (secondary suppression).

Transmission category: Individuals are assigned to a transmission category based on a clinical assessment of their most likely method of exposure and subsequent infection.

Estimated number of diagnosed persons living in Scotland – REVISED CALCULATION

METHOD: This estimate is calculated by subtracting the individuals known to have died, those who are known or presumed to have left Scotland, and those who have failed to attend for 10+ years from the cumulative number of diagnosed cases ever recorded.

NHS board abbreviations

AA Ayrshire & Arran	BR Borders	DG Dumfries & Galloway	GGC Greater Glasgow & Clyde
FF Fife	FV Forth Valley	GR Grampian	HG Highland
LO Lothian	LN Lanarkshire	OR Orkney	SH Shetland
TY Tayside	WI Western Isles		

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