

**Table S1: Read codes selected for SLE case definitions**

<b>Read code</b>	<b>Description</b>
N000.00	Systemic lupus erythematosus
N000000	Disseminated lupus erythematosus
N000100	Libman-Sacks disease
N000300	Systemic lupus erythematosus with organ or system involvement
N000400	Systemic lupus erythematosus with pericarditis
N000600	Cerebral lupus
N000z00	Systemic lupus erythematosus NOS
Nyu4300	[X]Other forms of systemic lupus erythematosus
M154.00	Lupus erythematosus
M154000	Lupus erythematosus chronicus*
M154100	Discoid lupus erythematosus*
M154200	Lupus erythematosus migrans*
M154300	Lupus erythematosus nodularis*
M154400	Lupus erythematosus profundus*
M154500	Lupus erythematosus tumidus*
M154600	Lupus erythematosus unguium mutilans*
M154700	Subacute cutaneous lupus erythematosus*
M154z00	Lupus erythematosus NOS
Myu7800	[X]Other local lupus erythematosus*
F371000	Polyneuropathy in disseminated lupus erythematosus
F4D3300	Eyelid discoid lupus erythematosus*
H57y400	Lung disease with systemic lupus erythematosus
K01x400	Nephrotic syndrome in systemic lupus erythematosus
K01x411	Lupus nephritis

\*=cutaneous variants of SLE included in definition 2.

Table S2 Comparative incidence and prevalence by SLE definition

		Definition 1-“Systemic lupus”			Definition 2-“Lupus”			Definition 3-“Lupus plus indicator”		
		Incidence rate, per 100,000 person-years (95% CI)								
<b>Overall</b>		4.91	(4.73,	5.09)	6.23	(6.03,	6.44)	4.58	(4.40,	4.76)
<b>Year*</b>	1999	5.10	(4.25,	5.96)	5.97	(5.05,	6.90)	4.41	(3.61,	5.20)
	2000	5.87	(5.03,	6.71)	7.14	(6.21,	8.06)	4.97	(4.20,	5.74)
	2001	5.30	(4.54,	6.06)	6.62	(5.77,	7.47)	4.82	(4.09,	5.54)
	2002	5.82	(5.06,	6.59)	7.15	(6.30,	8.00)	5.06	(4.34,	5.77)
	2003	5.19	(4.49,	5.90)	6.62	(5.82,	7.42)	4.69	(4.02,	5.36)
	2004	4.34	(3.71,	4.98)	6.17	(5.41,	6.92)	4.30	(3.66,	4.93)
	2005	5.54	(4.84,	6.25)	6.59	(5.82,	7.36)	4.74	(4.09,	5.39)
	2006	4.13	(3.53,	4.74)	5.60	(4.90,	6.31)	4.41	(3.78,	5.03)
	2007	4.85	(4.20,	5.51)	6.12	(5.39,	6.85)	4.56	(3.93,	5.20)
	2008	4.87	(4.22,	5.53)	6.26	(5.51,	7.00)	4.90	(4.25,	5.56)
	2009	4.42	(3.80,	5.05)	5.71	(5.00,	6.41)	4.40	(3.78,	5.02)
	2010	4.03	(3.43,	4.63)	5.51	(4.81,	6.21)	4.07	(3.47,	4.67)
	2011	4.92	(4.26,	5.59)	6.20	(5.45,	6.95)	4.67	(4.02,	5.32)
	2012	4.64	(3.98,	5.31)	5.74	(5.00,	6.48)	4.05	(3.43,	4.67)
<b>Gender</b>	Female	8.34	(8.01,	8.69)	10.17	(9.81,	10.55)	7.83	(7.51,	8.16)
	Male	1.44	(1.30,	1.58)	2.25	(2.08,	2.43)	1.30	(1.17,	1.44)
<b>Age</b>	0-9	0.19	(0.11,	0.35)	0.28	(0.17,	0.46)	0.16	(0.08,	0.30)
	10-19	1.92	(1.62,	2.29)	2.17	(1.84,	2.55)	1.76	(1.46,	2.11)
	20-29	3.65	(3.21,	4.16)	4.48	(3.99,	5.04)	3.41	(2.99,	3.90)
	30-39	5.89	(5.38,	6.44)	7.20	(6.64,	7.81)	5.43	(4.94,	5.96)
	40-49	7.22	(6.67,	7.81)	8.98	(8.37,	9.64)	6.90	(6.37,	7.48)
	50-59	7.39	(6.81,	8.03)	9.16	(8.51,	9.87)	6.77	(6.21,	7.38)
	60-69	6.20	(5.60,	6.86)	8.35	(7.65,	9.11)	5.99	(5.40,	6.64)
	70-79	6.17	(5.47,	6.96)	8.27	(7.45,	9.17)	5.80	(5.12,	6.56)
	80-89	3.21	(2.54,	4.05)	5.38	(4.49,	6.44)	2.71	(2.11,	3.49)
	90+	1.42	(0.64,	3.17)	3.08	(1.79,	5.31)	0.47	(0.12,	1.90)
<b>Region*</b>	North East	4.55	(3.28,	5.83)	4.94	(3.61,	6.27)	3.73	(2.57,	4.88)
	North West	4.75	(4.24,	5.26)	6.67	(6.07,	7.28)	4.86	(4.34,	5.37)
	Yorkshire & The Humber	4.28	(3.40,	5.16)	5.33	(4.35,	6.31)	3.87	(3.03,	4.70)
	East Midlands	4.53	(3.65,	5.40)	6.12	(5.10,	7.14)	4.35	(3.49,	5.21)
	West Midlands	3.87	(3.31,	4.43)	5.08	(4.44,	5.72)	3.50	(2.96,	4.03)
	East of England	6.03	(5.36,	6.69)	7.18	(6.46,	7.91)	5.39	(4.76,	6.02)
	South West	4.57	(3.92,	5.21)	5.70	(4.98,	6.42)	4.20	(3.58,	4.82)
	South Central	4.23	(3.72,	4.74)	5.09	(4.53,	5.64)	4.00	(3.50,	4.49)
	London	5.98	(5.34,	6.62)	7.36	(6.65,	8.07)	5.13	(4.54,	5.72)
	South East Coast	4.73	(4.12,	5.35)	6.04	(5.34,	6.74)	4.48	(3.88,	5.08)
	Northern Ireland	5.79	(4.70,	6.88)	6.53	(5.38,	7.69)	4.95	(3.94,	5.96)
	Scotland	5.32	(4.71,	5.94)	6.96	(6.26,	7.66)	4.99	(4.40,	5.59)
	Wales	4.58	(3.98,	5.18)	6.21	(5.51,	6.91)	4.76	(4.15,	5.37)

<b>Ethnicity</b>	Bangladeshi	0.00	.	.	3.06	(0.43,	21.73)	0.00	.	.
	Black African	13.78	(8.31,	22.85)	16.53	(10.42,	26.24)	14.70	(9.00,	23.99)
	Black Caribbean	31.46	(22.48,	44.03)	37.04	(27.17,	50.50)	30.56	(21.73,	42.99)
	Black Other	22.25	(12.64,	39.19)	24.12	(14.01,	41.55)	18.56	(9.98,	34.49)
	Chinese	9.35	(3.51,	24.91)	11.69	(4.87,	28.09)	7.01	(2.26,	21.75)
	Indian	9.90	(6.32,	15.53)	11.47	(7.55,	17.42)	8.86	(5.51,	14.26)
	Mixed	11.67	(6.63,	20.55)	10.70	(5.93,	19.32)	9.73	(5.23,	18.08)
	Other Asian	17.45	(10.34,	29.46)	19.95	(12.22,	32.56)	14.96	(8.50,	26.34)
	Other	5.48	(3.18,	9.44)	6.33	(3.81,	10.49)	4.22	(2.27,	7.84)
	Pakistani	9.95	(5.51,	17.96)	18.10	(11.67,	28.05)	9.95	(5.51,	17.97)
	Unknown	4.71	(4.14,	5.37)	6.26	(5.59,	7.00)	4.59	(4.03,	5.24)
	White	6.73	(6.35,	7.14)	8.41	(7.98,	8.87)	6.34	(5.96,	6.74)
	Unclassified	1.50	(1.30,	1.73)	2.06	(1.82,	2.33)	1.29	(1.10,	1.50)

**Point prevalence, per 100,000 (95% CI)**

<b>Year*</b>	1999	64.99	(62.04,	67.93)	84.83	(81.46,	88.20)	54.96	(52.25,	57.68)
	2000	66.60	(63.87,	69.33)	86.24	(83.13,	89.35)	56.25	(53.75,	58.76)
	2001	69.97	(67.30,	72.63)	90.86	(87.82,	93.90)	59.65	(57.18,	62.11)
	2002	73.77	(71.15,	76.38)	96.09	(93.10,	99.08)	63.71	(61.28,	66.15)
	2003	76.99	(74.36,	79.61)	100.22	(97.23,	103.22)	66.71	(64.27,	69.15)
	2004	78.04	(75.46,	80.62)	102.13	(99.18,	105.09)	68.44	(66.02,	70.85)
	2005	81.26	(78.66,	83.86)	106.52	(103.55,	109.50)	71.79	(69.35,	74.23)
	2006	84.39	(81.74,	87.05)	110.93	(107.88,	113.97)	74.80	(72.30,	77.30)
	2007	87.18	(84.49,	89.86)	113.99	(110.92,	117.07)	78.39	(75.84,	80.93)
	2008	88.61	(85.93,	91.29)	115.72	(112.65,	118.78)	80.61	(78.05,	83.16)
	2009	91.17	(88.46,	93.89)	118.86	(115.76,	121.96)	83.22	(80.62,	85.81)
	2010	94.61	(91.80,	97.43)	122.32	(119.12,	125.52)	86.19	(83.50,	88.87)
	2011	96.67	(93.81,	99.53)	125.51	(122.25,	128.77)	87.80	(85.08,	90.52)
	2012	97.04	(94.18,	99.90)	125.51	(122.26,	128.76)	88.09	(85.36,	90.81)
<b>Gender in 2012</b>	Female	167.62	(162.37,	173.00)	206.63	(200.79,	212.59)	152.45	(147.44,	157.58)
	Male	24.82	(22.81,	26.97)	42.53	(39.87,	45.31)	22.24	(20.34,	24.28)
<b>Age in 2012</b>	0-9	1.72	(0.79,	3.26)	2.10	(1.05,	3.76)	0.76	(0.02,	1.96)
	10-19	13.36	(10.35,	16.96)	14.95	(11.76,	18.74)	10.97	(8.26,	14.27)
	20-29	35.43	(30.73,	40.64)	39.94	(34.95,	45.45)	30.91	(26.54,	35.62)
	30-39	80.62	(73.60,	88.13)	94.58	(86.97,	102.68)	67.66	(61.24,	74.56)
	40-49	127.90	(119.57,	136.65)	160.89	(151.53,	170.68)	117.24	(109.27,	125.64)
	50-59	166.47	(156.22,	177.22)	210.55	(199.00,	222.59)	153.42	(143.58,	163.75)
	60-69	179.74	(168.30,	191.74)	242.32	(229.02,	256.20)	168.98	(157.90,	180.63)
	70-79	173.99	(160.07,	188.80)	242.27	(225.79,	259.63)	162.22	(148.78,	176.53)
	80-89	137.46	(121.08,	155.45)	203.49	(183.44,	225.14)	119.07	(103.85,	134.88)
	90+	95.01	(68.18,	128.89)	143.68	(110.16,	184.19)	76.47	(52.64,	104.40)

<b>Region in 2012</b>	North East	99.52	(78.79,	124.03)	138.57	(113.89,	167.01)	90.70	(70.97,	114.22)
	North West	102.22	(93.98,	110.98)	137.13	(127.57,	147.23)	95.74	(87.78,	104.23)
	Yorkshire & The Humber	99.09	(78.20,	123.84)	126.11	(102.38,	153.69)	88.79	(69.09,	112.37)
	East Midlands	65.16	(48.52,	85.68)	100.94	(79.92,	125.80)	67.72	(50.73,	88.58)
	West Midlands	75.03	(66.53,	84.32)	102.97	(92.97,	113.76)	68.91	(60.78,	77.84)
	East of England	117.42	(106.07,	129.65)	139.64	(127.24,	152.93)	104.21	(93.53,	115.77)
	South West	86.45	(77.21,	96.50)	112.28	(101.71,	123.65)	78.30	(69.51,	87.88)
	South Central	85.34	(77.90,	93.30)	109.72	(101.26,	118.70)	79.86	(72.67,	87.58)
	London	118.14	(109.48,	127.31)	141.84	(132.33,	151.86)	100.29	(92.32,	108.76)
	South East Coast	92.01	(83.33,	101.35)	114.63	(104.91,	125.00)	86.42	(78.01,	95.48)
	Northern Ireland	120.12	(103.39,	138.78)	137.74	(119.78,	157.63)	102.49	(87.09,	119.84)
	Scotland	108.15	(99.18,	117.70)	149.51	(138.94,	160.67)	96.65	(88.18,	105.70)
	Wales	79.07	(70.95,	87.87)	110.70	(101.05,	121.03)	75.18	(67.26,	83.77)
<b>Ethnicity in 2012</b>	Bangladeshi	80.27	(21.87,	205.53)	100.34	(32.58,	234.16)	60.20	(124.20,	175.94)
	Black African	179.81	(125.24,	250.07)	195.22	(138.15,	267.96)	164.40	(112.45,	232.08)
	Black Caribbean	517.51	(398.54,	660.84)	606.45	(477.01,	760.19)	525.59	(405.64,	669.91)
	Black Other	345.53	(231.40,	496.23)	405.10	(280.54,	566.09)	285.95	(183.22,	425.47)
	Chinese	188.39	(90.34,	346.46)	226.07	(116.82,	394.91)	188.39	(90.34,	346.46)
	Indian	193.09	(140.84,	258.37)	218.84	(162.94,	287.73)	167.35	(119.00,	228.77)
	Mixed	138.15	(88.52,	205.56)	149.67	(97.77,	219.30)	132.40	(83.93,	198.66)
	Other Asian	178.79	(113.34,	268.28)	202.11	(132.03,	296.14)	139.93	(82.93,	221.14)
	Other	143.26	(102.35,	195.08)	175.50	(129.83,	232.01)	132.52	(93.30,	182.66)
	Pakistani	142.79	(91.49,	212.46)	202.28	(140.09,	282.67)	130.89	(82.03,	198.17)
	Unknown	89.36	(80.19,	99.29)	126.04	(115.10,	137.73)	86.78	(77.75,	96.57)
	White	134.53	(128.21,	141.08)	166.74	(159.70,	174.02)	123.77	(117.71,	130.06)
	Unclassified	34.84	(31.30,	38.67)	48.55	(44.36,	53.04)	28.12	(24.95,	31.59)

\* adjusted for age and gender