

Model probabilities

Prevalence rates

Prevalence of Type 2 diabetes

Age	%
25 to 29	0.3%
30 to 34	0.6%
35 to 39	1.3%
40 to 44	3.0%
45 to 49	5.4%
50 to 54	8.3%
55 to 59	10.8%
60 to 64	13.9%
65 to 69	14.6%
70 to 74	14.5%
75 to 79	12.9%
80 to 84	8.6%

Source: Scottish Diabetes Survey 2013[1]

Prevalence of Ischemic heart disease (general population)

Age	Male	Female
25 to 34	0.1%	0.1%
35 to 44	0.3%	0.2%
45 to 54	2.4%	1.2%
55 to 64	8.0%	3.2%
65 to 74	14.2%	8.3%
Over 74	22.7%	15.9%

Source: British Heart Foundation 2012[2]

Prevalence of Heart Failure (general population)

Age	Male	Female
25 to 34	0.0%	0.0%
35 to 44	0.0%	1.0%
45 to 54	1.0%	0.0%
55 to 64	2.0%	1.0%
65 to 74	5.0%	3.0%
Over 74	8.0%	6.0%

Source: Welsh Health Survey 2010[3]

Prevalence of Myocardial infarction (general population)

Age	Male	Female
25 to 34	0.2%	0.0%
35 to 44	0.6%	0.1%
45 to 54	2.1%	0.7%
55 to 64	6.3%	1.6%
65 to 74	14.4%	3.3%
Over 74	16.6%	9.1%

Source: British Heart Foundation 2012[2]

Prevalence of RRT for CKD, per 1,000,000 of population (general population)

Age	Male	Female
25 to 29	431	298
30 to 34	631	423
35 to 39	789	554
40 to 44	1093	748
45 to 49	1418	915
50 to 54	1723	1129
55 to 59	1989	1254
60 to 64	1903	1157
65 to 69	2391	1517
70 to 74	2700	1503
75 to 79	2858	1524
80 to 84	2943	1143
Over 85	2016	492

Source: The Renal Registry 2012[4]

Prevalence of Cerebrovascular disease (stroke) (general population)

Age	Male	Female
25 to 34	0.0%	0.1%
35 to 44	0.5%	0.4%
45 to 54	1.2%	0.9%
55 to 64	3.0%	2.3%
65 to 74	7.1%	4.2%
Over 74	13.1%	10.7%

Source: British Heart Foundation 2012[2]

Prevalence of diabetic retinopathy (diabetic population)

Age	Rate	95% CI
40 to 64	28%	23.0-33.6
Over 64	29.50%	25.5-33.9

Source: Zhang et al. (2010)[5]

Prevalence of blindness as a result of diabetes (diabetic population)

Age	%
16 to 64	0.03%
Over 64	0.15%

Source: Prasad et al. (2001)[6]

Prevalence of diabetic foot ulcers (diabetic population)

Prevalence of Diabetic foot ulcers (diabetic population)	1.7%
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Source: Abbott et al. (2001)[7]

Prevalence of amputation per 100,000 of population (general population)

Prevalence of amputation per 100,000 of population (general population)	26.3
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Source: Ahmad et al. (2014)[8]

Incidence rates

Incidence of type 2 diabetes, rate per 100,000 per year (general population)

Age	Rate
20 to 29	25
30 to 39	124
40 to 49	323
50 to 59	606
60 to 69	826
Over 69	762

Source: Scottish Diabetes Survey 2013[1]

Incidence of Ischemic heart disease, rate per 100,000 per year (general population)

Age	Male	Female
0 to 44	3.2	1.5
45 to 54	47	24.2
55 to 64	119.7	55.7
65 to 74	169.3	104
Over 74	105.2	82.2

Source: British Heart Foundation 2012[2]

Incidence of heart failure, rate per 100,000 per year (general population)

Age	Male	Female
0 to 44	2.3	1.2
45 to 54	20.4	10.5
55 to 64	71.5	31
65 to 74	173.1	98.7
Over 74	287.5	239.8

Source: British Heart Foundation 2012[2]

Incidence of acute myocardial infarction, rate per 100,000 per year (general population)

Age	Male	Female
0 to 44	9	2
45 to 54	32	9
55 to 64	53	24
65 to 74	102	60
Over 74	199	139

Source: British Heart Foundation 2012[2]

Incidence of RRT, rate per 1,000,000 per year (general population)

Age	Rate
15 to 64	82.0
Over 65	429.3

Source: EUGLOREH[9]

Incidence of Cerebrovascular disease (stroke), rate per 100,000 per year (general population)

Age	Male	Female
0 to 34	0	3
35 to 44	35	26
45 to 54	76	60
55 to 64	214	140
65 to 74	678	464
75 to 84	1085	1109

Source: Oxford Vascular study[10]

Incidence of diabetic retinopathy, per 1000 per year (diabetic population)

Age	Male	95% CI lower	95% CI upper	Female	95% CI lower	95% CI upper
25 to 44	0	0	13.6	5.7	1.4	30.7
45 to 64	0	0	1.9	1.7	0.5	6.2
65 to 84	5.4	3	9.8	5.9	3.3	10.5

Over 84	25	9.2	71.3	14.4	5	36.6
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Source: DARTS diabetes register McAlpine et al. (2005)[11]

Incidence of foot ulceration (diabetic population)

Annual incidence	2.20%
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Source: Abbott et al. (2002)[7]

Incidence of amputation, per 100,000 per years (non-diabetic population)

Age	Male	95% CI lower	95% CI upper	Female	95% CI lower	95% CI upper
55 to 74	12	7	17	7	3	10
75 to 84	91	63	121	58	39	78
Greater than 84	154	92	225	123	83	167

Incidence of amputation, per 100,000 per years (diabetic population)

Age	Male	95% CI lower	95% CI upper	Female	95% CI lower	95% CI upper
45 to 64	73	33	117	75	22	138
65 to 74	194	118	282	120	55	197
75 to 84	222	129	328	297	194	408
Over 84	929	545	1369	329	167	518

Source: Johannesson et al. (2009)[12]

Mortality

Age dependent all other-cause mortality, rate per 100,000 of population per year

Age	Gender	All cause	CHD	Cerebrovascular disease (stroke)	Diabetes
15 to 44	Male	107.4	7.1	2.5	0.7
	Female	56.5	1.7	2.0	0.4
45 to 64	Male	603.5	119.3	23.9	3.6
	Female	391.9	29.7	18.0	2.1
65 to 74	Male	2264.3	444.7	122.7	15.6
	Female	1458.3	179.5	89.1	10.0
75 to 84	Male	6221.8	1181.6	539.0	48.1
	Female	4499.4	645.9	506.4	32.8

Over 84	Male	16260.7	2763.9	1749.0	110.3
	Female	14657.4	2005.1	2038.3	91.9

Source: ONS.[13]

Mortality rate for Ischemic heart disease patients, per annum

Lower limit	1.40%
Upper limit	6.50%

Source: NICE CG108. (2006)[14]

Mortality rate for heart failure

First year	38%
Mortality at 5 years	43%

Source: Cowie et al. (2000)[15]; Hobbs et al. (2007)[16]

Case fatality rates of myocardial infarction

Age	Men	Women
30 to 54	14%	13%
55 to 64	14%	18%
65 to 74	20%	25%
75 to 84	28%	36%
Over 84	38%	46%

Source: British Heart Foundation 2012[2]

Case fatality rates of cerebrovascular disease (stroke), for those admitted to hospital

Men	England, 2006	n
Under 75	10.3%	2404
All ages	17.1%	7615
Women	England, 2006	n
Under 75	13.1%	2188
All ages	24.7%	12119

Source: British Heart Foundation 2012[2]

Mortality rate per 1,000 RRT patients

Age	Rate
25 to 29	13
30 to 34	12
35 to 39	18
40 to 44	24

45 to 49	28
50 to 54	37
55 to 59	65
60 to 64	75
65 to 69	111
70 to 74	139
75 to 79	205
80 to 84	274
Over 85	363

Source: The Renal Registry 2012[4]

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