South Africa (Coloured) - The probabilities of a major osteoporotic fracture in women

The following tables give the 10-year probability (%) of a major osteoporotic fracture (hip, clinical spine, forearm or proximal humerus fracture) according to the T-score for femoral neck BMD, the number of clinical risk factors (CRF) and age. Each table provides a mean estimate and a range, based on the epidemiology of South Africa (Coloured). The range is not a confidence interval, but because the weight of different risk factors varies, is a true range.
Note that the BMI is set at 24 kg/m²

Age = 50 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	9.6	6.0	4.0	2.8	2.2	1.8	1.5	1.3	1.3	1.2	1.2
1	15 (13-19)	9.2 (8.1-12)	6.1 (5.2-7.8)	4.3 (3.4-5.5)	3.3 (2.4-4.2)	2.7 (1.9-3.5)	2.2 (1.5-3.0)	2.0 (1.3-2.8)	1.9 (1.2-2.7)	1.8 (1.2-2.6)	1.8 (1.1-2.5)
2	22 (17-31)	14 (11-20)	9.3 (7.0-13)	6.6 (4.6-9.3)	5.0 (3.2-7.6)	4.0 (2.3-6.5)	3.3 (1.9-5.6)	3.0 (1.6-5.2)	2.8 (1.5-4.9)	2.7 (1.4-4.8)	2.6 (1.3-4.6)
3	32 (22-43)	21 (15-27)	14 (9.7-20)	9.7 (6.2-15)	7.3 (4.2-12)	5.9 (3.1-10)	4.9 (2.4-9.0)	4.4 (2.1-8.3)	4.1 (1.9-7.9)	3.9 (1.8-7.6)	3.8 (1.7-7.3)
4	44 (31-56)	30 (20-37)	20 (13-25)	14 (9.2-19)	11 (6.9-16)	8.4 (5.2-13)	7.0 (4.0-12)	6.3 (3.4-11)	5.9 (3.1-10)	5.6 (2.9-9.7)	5.4 (2.8-9.4)
5	58 (48-68)	41 (32-47)	28 (22-32)	20 (15-24)	15 (11-19)	12 (9.0-16)	9.9 (7.5-14)	8.8 (6.4-12)	8.3 (5.8-12)	7.9 (5.4-11)	7.6 (5.1-11)
6	72	54	39	28	21	17	14	12	11	11	10

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women from South Africa (Coloured).

Age = 55 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	11	7.6	5.3	3.9	3.1	2.5	2.1	1.9	1.8	1.7	1.6
1	17 (15-21)	12 (10-14)	8.1 (6.7-9.8)	5.9 (4.7-7.2)	4.6 (3.4-5.8)	3.7 (2.6-4.9)	3.1 (2.1-4.2)	2.9 (1.9-3.9)	2.7 (1.7-3.7)	2.5 (1.6-3.5)	2.4 (1.5-3.4)
2	25 (20-34)	17 (14-23)	12 (9.1-16)	8.8 (6.2-12)	6.8 (4.4-10)	5.5 (3.3-8.8)	4.6 (2.6-7.6)	4.2 (2.3-7.1)	3.9 (2.1-6.7)	3.7 (1.9-6.3)	3.5 (1.8-6.0)
3	35 (27-45)	24 (18-32)	17 (12-25)	13 (8.3-20)	9.9 (5.9-16)	8.0 (4.4-14)	6.7 (3.4-12)	6.1 (3.0-11)	5.6 (2.7-11)	5.3 (2.5-10)	5.0 (2.3-9.6)
4	48 (35-57)	34 (24-40)	25 (17-31)	18 (12-25)	14 (9.6-21)	11 (7.2-18)	9.4 (5.6-15)	8.6 (4.8-14)	8.0 (4.3-13)	7.5 (4.0-13)	7.1 (3.7-12)
5	61 (53-69)	46 (38-51)	34 (27-38)	25 (20-31)	20 (15-25)	16 (12-21)	13 (10-18)	12 (8.7-17)	11 (7.8-16)	10 (7.2-15)	9.9 (6.7-14)
6	74	59	45	34	27	22	18	16	15	14	14

Age = 60 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	14	9.4	6.7	5.0	3.9	3.1	2.7	2.4	2.2	2.1	1.9
1	20 (18-23)	14 (12-16)	10.0 (8.3-12)	7.5 (5.9-8.8)	5.8 (4.3-7.2)	4.7 (3.3-6.1)	4.0 (2.7-5.3)	3.6 (2.4-4.9)	3.3 (2.2-4.6)	3.1 (2.0-4.3)	2.9 (1.8-4.1)
2	28 (24-36)	20 (17-26)	15 (11-19)	11 (7.8-15)	8.5 (5.6-12)	6.8 (4.2-10)	5.8 (3.4-9.2)	5.2 (2.9-8.6)	4.8 (2.6-8.0)	4.4 (2.4-7.5)	4.2 (2.2-7.0)
3	39 (31-47)	28 (22-36)	21 (15-29)	16 (10-23)	12 (7.4-19)	9.7 (5.5-16)	8.3 (4.4-14)	7.5 (3.8-13)	6.8 (3.4-13)	6.4 (3.1-12)	5.9 (2.8-11)
4	51 (40-59)	38 (29-45)	29 (21-36)	22 (16-30)	17 (12-25)	14 (9.0-21)	12 (7.2-18)	10 (6.1-17)	9.6 (5.4-16)	8.9 (4.9-15)	8.3 (4.5-14)
5	64 (57-69)	50 (43-54)	38 (32-44)	29 (24-36)	23 (19-29)	19 (15-25)	16 (12-22)	14 (11-20)	13 (9.4-19)	12 (8.5-17)	11 (7.8-16)
6	75	62	49	39	31	25	22	19	18	17	16

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women from South Africa (Coloured).

Age = 65 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	15	10	7.6	5.7	4.4	3.5	3.0	2.7	2.4	2.2	2.0
1	21 (20-24)	15 (13-17)	11 (9.3-12)	8.3 (6.6-9.8)	6.4 (4.9-7.9)	5.1 (3.7-6.6)	4.4 (3.1-5.9)	3.9 (2.7-5.4)	3.5 (2.3-4.9)	3.2 (2.1-4.5)	3.0 (1.9-4.2)
2	30 (25-37)	22 (18-27)	16 (12-20)	12 (8.8-16)	9.2 (6.3-13)	7.3 (4.7-11)	6.3 (3.8-9.8)	5.6 (3.3-9.0)	5.1 (2.8-8.3)	4.6 (2.5-7.6)	4.3 (2.3-7.1)
3	40 (32-47)	30 (24-38)	22 (17-30)	17 (12-25)	13 (8.4-20)	10 (6.2-17)	9.0 (5.1-15)	8.0 (4.3-14)	7.2 (3.7-13)	6.6 (3.3-12)	6.0 (3.0-11)
4	51 (42-57)	40 (31-47)	30 (23-38)	23 (17-31)	18 (13-26)	14 (10-22)	12 (8.1-19)	11 (6.8-18)	10 (5.9-16)	9.2 (5.2-15)	8.4 (4.7-14)
5	63 (58-67)	51 (45-56)	40 (35-45)	31 (27-37)	24 (21-31)	20 (16-26)	17 (13-23)	15 (11-21)	14 (9.8-19)	13 (8.7-18)	12 (7.9-16)
6	73	62	50	40	32	26	23	20	18	17	15

Age = 70 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	15	11	8.2	6.2	4.8	3.9	3.3	2.9	2.6	2.3	2.1
1	22 (20-27)	16 (14-19)	12 (9.8-14)	8.9 (7.1-11)	6.8 (5.3-8.1)	5.5 (4.1-6.4)	4.7 (3.4-5.4)	4.0 (2.9-4.8)	3.6 (2.5-4.2)	3.2 (2.2-3.8)	2.9 (2.0-3.5)
2	32 (26-40)	23 (18-30)	17 (13-22)	13 (9.5-17)	9.7 (6.9-13)	7.7 (5.3-10)	6.5 (4.3-8.7)	5.6 (3.6-7.6)	4.9 (3.1-6.7)	4.4 (2.7-6.0)	3.9 (2.4-5.4)
3	44 (35-54)	33 (25-43)	25 (18-33)	18 (13-25)	14 (9.2-20)	11 (7.0-16)	9.0 (5.7-14)	7.7 (4.7-12)	6.7 (4.0-10)	5.9 (3.5-9.4)	5.3 (3.1-8.5)
4	57 (48-65)	45 (36-53)	34 (26-42)	26 (19-32)	19 (14-25)	15 (11-21)	12 (9.0-18)	10 (7.5-15)	9.1 (6.3-13)	8.0 (5.5-12)	7.1 (4.9-11)
5	70 (63-74)	58 (50-63)	46 (39-51)	35 (29-40)	27 (22-32)	21 (17-25)	17 (14-21)	14 (12-18)	12 (10-16)	11 (8.9-14)	9.4 (7.8-13)
6	79	70	59	47	36	28	23	19	16	14	12

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women from South Africa (Coloured).

Age = 75 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	16	12	9.0	6.9	5.3	4.4	3.8	3.3	2.9	2.6	2.3
1	24 (19-38)	18 (14-28)	14 (10-20)	10 (7.7-15)	7.8 (5.8-11)	6.3 (4.7-8.1)	5.3 (3.9-6.4)	4.5 (3.3-5.2)	3.9 (2.8-4.6)	3.4 (2.4-4.0)	3.0 (2.2-3.6)
2	36 (26-53)	27 (19-42)	20 (14-31)	15 (10-23)	11 (7.6-17)	9.1 (6.0-13)	7.4 (4.9-10)	6.2 (4.1-8.2)	5.2 (3.5-7.1)	4.5 (3.0-6.3)	3.9 (2.6-5.6)
3	50 (34-64)	39 (25-53)	30 (19-42)	23 (14-32)	17 (10-24)	13 (8.0-19)	11 (6.5-15)	8.6 (5.4-12)	7.2 (4.5-10)	6.0 (3.9-8.6)	5.2 (3.4-7.3)
4	63 (44-74)	53 (34-64)	42 (26-52)	33 (20-41)	24 (15-31)	19 (12-25)	15 (9.8-20)	12 (8.2-16)	9.8 (7.0-13)	8.2 (6.0-11)	6.9 (5.2-9.5)
5	75 (58-80)	66 (47-73)	56 (37-62)	45 (29-51)	35 (22-40)	27 (18-32)	21 (15-25)	17 (13-20)	14 (11-17)	11 (9.3-14)	9.2 (7.9-12)
6	83	77	70	59	48	38	30	24	19	15	12

Age = 80 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	16	12	9.6	7.4	5.8	4.9	4.2	3.6	3.1	2.7	2.3
1	24 (19-38)	19 (14-29)	14 (11-22)	11 (8.2-16)	8.5 (6.3-12)	7.0 (5.2-9.4)	5.8 (4.3-7.4)	4.9 (3.6-5.9)	4.1 (3.0-4.8)	3.6 (2.6-4.1)	3.1 (2.2-3.6)
2	35 (25-51)	27 (19-41)	21 (14-32)	16 (11-24)	12 (8.3-19)	10 (6.7-15)	8.2 (5.5-12)	6.8 (4.5-9.4)	5.7 (3.8-7.6)	4.8 (3.2-6.2)	4.1 (2.7-5.5)
3	47 (32-62)	38 (25-52)	30 (19-42)	23 (14-32)	18 (11-25)	14 (8.9-20)	12 (7.2-16)	9.5 (6.0-13)	7.8 (5.0-11)	6.5 (4.2-9.0)	5.5 (3.6-7.6)
4	59 (41-70)	50 (33-61)	41 (25-51)	33 (20-41)	26 (15-32)	21 (13-26)	17 (10-21)	13 (8.7-17)	11 (7.3-14)	8.9 (6.2-12)	7.4 (5.3-9.9)
5	70 (53-76)	63 (44-69)	54 (36-60)	44 (28-50)	36 (23-41)	29 (19-34)	23 (16-27)	19 (13-22)	15 (11-18)	12 (9.4-15)	10.0 (8.1-12)
6	78	73	66	57	48	40	32	26	21	17	14

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women from South Africa (Coloured).

Age = 85 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	16	13	10.0	7.8	6.4	5.3	4.5	3.8	3.2	2.7	2.3
1	24 (19-37)	19 (14-30)	15 (11-23)	12 (8.6-18)	9.4 (6.9-14)	7.7 (5.7-11)	6.4 (4.7-8.8)	5.3 (3.9-7.0)	4.4 (3.2-5.7)	3.7 (2.7-4.6)	3.2 (2.3-3.7)
2	34 (24-49)	27 (19-41)	22 (15-33)	17 (11-26)	14 (9.2-21)	11 (7.4-17)	9.2 (6.1-14)	7.6 (5.0-11)	6.2 (4.1-8.9)	5.2 (3.4-7.2)	4.3 (2.9-5.9)
3	45 (31-59)	38 (25-51)	31 (20-42)	24 (15-34)	20 (12-28)	16 (9.9-23)	13 (8.1-18)	11 (6.6-15)	8.8 (5.5-12)	7.3 (4.5-10)	6.0 (3.8-8.4)
4	56 (40-67)	49 (32-60)	41 (26-51)	34 (20-43)	28 (17-36)	23 (14-29)	19 (11-24)	15 (9.5-20)	13 (7.9-16)	10 (6.6-13)	8.4 (5.6-11)
5	67 (49-73)	60 (42-67)	53 (35-60)	45 (29-51)	38 (24-44)	32 (20-37)	27 (17-31)	22 (14-26)	18 (12-21)	14 (9.9-17)	12 (8.3-14)
6	75	70	64	57	50	43	36	30	25	20	16

Age = 90 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	16	12	9.8	7.8	6.5	5.4	4.5	3.8	3.2	2.6	2.2
1	23 (18-36)	19 (14-30)	15 (11-24)	12 (8.7-19)	9.8 (7.2-16)	8.1 (6.0-13)	6.7 (4.9-10)	5.6 (4.1-8.3)	4.6 (3.4-6.7)	3.8 (2.8-5.4)	3.2 (2.3-4.4)
2	32 (23-47)	27 (18-40)	22 (15-33)	18 (12-27)	15 (9.7-23)	12 (8.0-19)	10 (6.6-16)	8.3 (5.4-13)	6.8 (4.5-10)	5.6 (3.7-8.5)	4.6 (3.0-6.9)
3	43 (30-56)	37 (24-49)	30 (20-42)	25 (16-36)	21 (13-30)	18 (11-26)	15 (8.9-21)	12 (7.3-17)	10 (6.0-14)	8.3 (4.9-12)	6.8 (4.1-9.6)
4	54 (37-64)	47 (31-58)	41 (26-51)	35 (21-44)	30 (18-38)	25 (15-33)	21 (12-28)	18 (10-23)	15 (8.4-19)	12 (7.0-16)	9.9 (5.8-13)
5	64 (46-70)	58 (40-65)	52 (34-59)	46 (29-52)	40 (24-47)	35 (21-41)	30 (18-35)	25 (15-30)	21 (12-25)	18 (10-21)	14 (8.7-17)
6	72	68	63	57	52	46	41	35	30	25	21