

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

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	11	6.6	4.2	2.9	2.1	1.6	1.3	1.1	1.0	1.0	0.9
1	16 (13-21)	10 (8.8-13)	6.5 (5.7-8.4)	4.4 (3.6-5.7)	3.2 (2.4-4.1)	2.5 (1.8-3.1)	2.0 (1.4-2.6)	1.7 (1.1-2.3)	1.5 (1.0-2.1)	1.4 (0.9-2.0)	1.4 (0.9-1.9)
2	24 (18-33)	15 (11-21)	9.7 (7.5-14)	6.6 (4.9-9.3)	4.8 (3.3-7.0)	3.7 (2.3-5.7)	3.0 (1.7-4.9)	2.5 (1.4-4.3)	2.2 (1.2-3.9)	2.1 (1.1-3.8)	2.0 (1.0-3.6)
3	34 (24-44)	22 (15-29)	14 (10-19)	9.7 (6.8-14)	7.0 (4.4-11)	5.3 (3.1-9.0)	4.3 (2.3-7.7)	3.6 (1.8-6.7)	3.2 (1.5-6.1)	3.1 (1.4-5.9)	2.9 (1.3-5.7)
4	45 (33-56)	31 (21-39)	21 (14-25)	14 (9.2-18)	10 (6.6-14)	7.7 (5.0-12)	6.2 (3.7-9.9)	5.2 (2.9-8.6)	4.6 (2.4-7.8)	4.3 (2.2-7.5)	4.1 (2.1-7.3)
5	57 (47-66)	41 (32-49)	29 (22-33)	20 (15-23)	14 (11-18)	11 (8.0-14)	8.6 (6.4-12)	7.2 (5.3-10)	6.4 (4.6-9.3)	6.0 (4.2-8.8)	5.8 (3.9-8.5)
6	69	53	38	27	20	15	12	9.9	8.8	8.2	7.9

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	12	7.9	5.2	3.7	2.7	2.1	1.7	1.5	1.3	1.2	1.2
1	18 (15-22)	12 (11-14)	7.8 (6.8-9.7)	5.5 (4.5-6.8)	4.1 (3.1-5.0)	3.2 (2.3-4.0)	2.6 (1.8-3.4)	2.2 (1.4-2.9)	1.9 (1.3-2.7)	1.8 (1.2-2.6)	1.7 (1.1-2.4)
2	26 (20-34)	17 (13-23)	11 (9.1-16)	8.1 (6.0-11)	6.0 (4.1-8.6)	4.6 (2.9-7.1)	3.7 (2.2-6.1)	3.1 (1.8-5.3)	2.8 (1.5-4.9)	2.6 (1.4-4.6)	2.5 (1.3-4.4)
3	35 (26-44)	24 (18-31)	16 (12-22)	12 (8.3-17)	8.6 (5.6-13)	6.7 (3.9-11)	5.4 (2.9-9.3)	4.5 (2.3-8.1)	4.1 (2.0-7.5)	3.8 (1.8-7.1)	3.6 (1.7-6.8)
4	46 (35-54)	33 (24-39)	23 (16-28)	16 (11-21)	12 (8.4-17)	9.4 (6.3-14)	7.6 (4.7-12)	6.3 (3.6-10)	5.7 (3.1-9.6)	5.3 (2.8-9.1)	5.0 (2.6-8.7)
5	57 (48-63)	43 (35-48)	31 (25-35)	22 (18-27)	17 (13-21)	13 (9.9-17)	10 (8.0-14)	8.7 (6.6-12)	7.8 (5.6-11)	7.3 (5.0-11)	6.9 (4.7-10)
6	67	53	40	30	23	18	14	12	11	9.9	9.3

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	12	8.4	5.9	4.3	3.2	2.5	2.0	1.7	1.5	1.4	1.3
1	18 (16-21)	12 (11-14)	8.6 (7.3-10)	6.2 (5.0-7.5)	4.7 (3.6-5.6)	3.7 (2.7-4.6)	3.0 (2.1-3.9)	2.5 (1.7-3.4)	2.3 (1.5-3.1)	2.1 (1.3-2.9)	1.9 (1.2-2.8)
2	24 (19-31)	17 (14-22)	12 (9.9-16)	9.0 (6.8-12)	6.8 (4.8-9.6)	5.3 (3.5-8.0)	4.3 (2.6-6.8)	3.6 (2.1-5.9)	3.2 (1.8-5.4)	3.0 (1.6-5.1)	2.8 (1.5-4.8)
3	33 (26-40)	24 (18-29)	17 (13-22)	13 (9.3-18)	9.6 (6.5-15)	7.5 (4.7-12)	6.1 (3.5-10)	5.1 (2.7-8.9)	4.6 (2.4-8.3)	4.2 (2.1-7.8)	4.0 (1.9-7.3)
4	42 (34-50)	32 (24-37)	23 (17-29)	17 (13-23)	13 (9.6-19)	10 (7.3-16)	8.5 (5.5-13)	7.0 (4.2-11)	6.4 (3.6-11)	5.9 (3.2-9.9)	5.5 (2.9-9.4)
5	52 (45-57)	41 (34-45)	31 (25-36)	23 (19-28)	18 (14-23)	14 (11-19)	12 (9.0-16)	9.6 (7.4-14)	8.7 (6.3-12)	8.0 (5.6-12)	7.5 (5.1-11)
6	61	50	39	31	24	19	15	13	12	11	10.0

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	11	8.2	5.9	4.4	3.3	2.6	2.1	1.8	1.6	1.4	1.3
1	16 (15-18)	12 (10-13)	8.5 (7.2-9.7)	6.3 (5.1-7.3)	4.8 (3.7-5.7)	3.8 (2.8-4.7)	3.0 (2.2-3.9)	2.6 (1.8-3.4)	2.3 (1.5-3.1)	2.1 (1.3-2.9)	1.9 (1.2-2.7)
2	22 (18-27)	16 (13-20)	12 (9.7-15)	8.9 (6.9-12)	6.9 (5.0-9.4)	5.4 (3.7-7.8)	4.3 (2.8-6.6)	3.6 (2.2-5.7)	3.2 (1.9-5.3)	2.9 (1.6-4.9)	2.7 (1.5-4.6)
3	29 (23-35)	22 (17-26)	16 (13-21)	12 (9.5-17)	9.6 (6.8-14)	7.5 (5.0-12)	6.1 (3.8-9.8)	5.1 (3.0-8.5)	4.5 (2.5-7.9)	4.1 (2.2-7.3)	3.8 (1.9-6.8)
4	37 (31-44)	29 (23-34)	22 (17-27)	17 (13-22)	13 (9.8-18)	10 (7.6-15)	8.3 (5.7-13)	7.0 (4.5-11)	6.2 (3.8-10)	5.7 (3.2-9.4)	5.2 (2.9-8.8)
5	46 (41-50)	37 (32-41)	29 (24-33)	22 (19-27)	17 (14-22)	14 (11-18)	11 (9.1-15)	9.4 (7.4-13)	8.4 (6.3-12)	7.6 (5.5-11)	7.0 (4.8-10)
6	54	45	36	29	23	18	15	12	11	10	9.2

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	10	7.5	5.6	4.3	3.3	2.6	2.1	1.8	1.6	1.4	1.3
1	15 (12-18)	11 (9.0-14)	8.2 (6.6-10)	6.2 (4.9-7.7)	4.8 (3.6-5.9)	3.7 (2.8-4.6)	3.0 (2.2-3.6)	2.5 (1.8-3.0)	2.2 (1.5-2.6)	1.9 (1.3-2.3)	1.8 (1.2-2.1)
2	21 (17-27)	16 (12-20)	12 (8.9-16)	8.9 (6.6-12)	6.8 (4.9-9.2)	5.3 (3.7-7.3)	4.2 (2.8-5.8)	3.5 (2.3-4.9)	3.0 (1.9-4.2)	2.7 (1.7-3.8)	2.4 (1.5-3.4)
3	29 (23-36)	22 (17-29)	17 (12-22)	13 (9.1-17)	9.7 (6.7-14)	7.5 (5.0-11)	5.8 (3.8-8.6)	4.8 (3.1-7.2)	4.1 (2.6-6.3)	3.6 (2.2-5.6)	3.2 (1.9-5.0)
4	39 (31-46)	30 (23-37)	23 (18-29)	18 (13-23)	14 (9.9-18)	10 (7.4-14)	8.1 (5.7-11)	6.6 (4.5-9.4)	5.6 (3.8-8.2)	4.8 (3.2-7.3)	4.3 (2.8-6.5)
5	49 (41-54)	40 (33-45)	32 (25-37)	25 (20-29)	19 (15-23)	15 (11-18)	11 (8.8-14)	9.1 (7.1-12)	7.6 (6.0-10)	6.5 (5.2-8.9)	5.7 (4.5-7.9)
6	59	50	41	33	26	20	15	12	10	8.7	7.5

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	9.3	7.2	5.6	4.4	3.5	2.8	2.3	2.0	1.7	1.5	1.4
1	15 (11-25)	11 (8.2-19)	8.7 (6.3-15)	6.8 (4.8-11)	5.3 (3.7-8.4)	4.2 (2.9-6.3)	3.3 (2.3-4.8)	2.8 (1.9-3.8)	2.4 (1.7-3.1)	2.1 (1.4-2.6)	1.8 (1.3-2.2)
2	22 (14-34)	17 (11-27)	13 (8.5-21)	10 (6.5-16)	8.0 (5.0-12)	6.2 (3.9-9.4)	4.8 (3.1-7.2)	4.0 (2.5-5.8)	3.4 (2.1-4.7)	2.9 (1.8-3.9)	2.5 (1.6-3.3)
3	31 (20-43)	25 (15-35)	20 (12-28)	15 (8.9-22)	12 (6.8-17)	9.2 (5.3-13)	7.1 (4.1-10)	5.8 (3.4-8.5)	4.8 (2.8-7.0)	4.0 (2.4-5.8)	3.4 (2.1-4.9)
4	42 (26-52)	35 (21-44)	28 (16-37)	22 (13-30)	18 (9.7-23)	14 (7.6-18)	10 (5.9-14)	8.4 (4.9-11)	6.8 (4.1-9.3)	5.6 (3.5-7.7)	4.7 (3.0-6.5)
5	53 (34-60)	46 (28-53)	38 (22-45)	31 (18-37)	25 (14-30)	20 (11-24)	15 (8.7-19)	12 (7.3-15)	9.8 (6.2-12)	8.0 (5.3-10)	6.5 (4.6-8.4)
6	64	57	50	42	34	28	22	17	14	11	9.2

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	8.9	7.1	5.7	4.6	3.7	3.0	2.5	2.2	1.9	1.7	1.5
1	14 (10-24)	11 (7.9-19)	8.8 (6.3-15)	7.0 (5.0-12)	5.6 (4.0-9.1)	4.5 (3.2-7.1)	3.7 (2.6-5.6)	3.1 (2.2-4.6)	2.7 (1.9-3.7)	2.3 (1.6-3.1)	2.0 (1.4-2.6)
2	20 (13-32)	16 (11-26)	13 (8.5-21)	11 (6.7-17)	8.4 (5.3-13)	6.7 (4.3-10)	5.4 (3.4-8.3)	4.5 (2.9-6.8)	3.8 (2.4-5.6)	3.2 (2.1-4.6)	2.8 (1.8-3.9)
3	29 (18-40)	24 (14-34)	19 (11-28)	16 (9.2-23)	12 (7.3-18)	9.9 (5.8-14)	7.9 (4.6-11)	6.6 (3.9-9.4)	5.5 (3.3-7.8)	4.6 (2.8-6.5)	3.9 (2.4-5.5)
4	38 (23-48)	32 (19-42)	27 (15-35)	22 (12-29)	18 (10.0-24)	14 (8.0-19)	12 (6.5-15)	9.5 (5.5-13)	7.9 (4.6-10)	6.5 (4.0-8.7)	5.5 (3.4-7.4)
5	49 (30-55)	42 (25-49)	36 (21-42)	30 (17-36)	25 (14-30)	20 (11-25)	17 (9.1-20)	14 (7.7-17)	11 (6.6-14)	9.3 (5.6-12)	7.7 (4.9-9.7)
6	59	53	47	40	34	28	23	19	16	13	11

Ten years probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	8.7	7.2	5.9	4.8	4.0	3.3	2.8	2.4	2.1	1.8	1.6
1	13 (9.5-23)	11 (7.8-19)	9.0 (6.4-16)	7.4 (5.2-13)	6.1 (4.2-10)	4.9 (3.4-8.2)	4.1 (2.9-6.7)	3.5 (2.5-5.6)	3.1 (2.1-4.7)	2.6 (1.8-3.9)	2.3 (1.6-3.3)
2	19 (13-31)	16 (10-26)	13 (8.6-21)	11 (7.0-18)	9.1 (5.7-14)	7.4 (4.7-12)	6.2 (3.9-9.8)	5.3 (3.3-8.2)	4.5 (2.8-6.9)	3.8 (2.4-5.8)	3.3 (2.1-4.9)
3	27 (17-38)	23 (14-33)	19 (12-28)	16 (9.6-24)	13 (7.9-20)	11 (6.4-16)	9.2 (5.3-14)	7.8 (4.5-11)	6.6 (3.8-9.6)	5.6 (3.3-8.1)	4.8 (2.8-6.8)
4	36 (22-46)	32 (18-41)	27 (15-36)	23 (13-30)	19 (11-26)	16 (8.8-22)	13 (7.3-18)	11 (6.3-15)	9.6 (5.4-13)	8.2 (4.6-11)	6.9 (4.0-9.2)
5	46 (28-53)	41 (24-48)	36 (20-42)	31 (17-37)	27 (14-32)	23 (12-27)	19 (10-23)	16 (8.7-20)	14 (7.5-17)	12 (6.5-15)	10.0 (5.6-12)
6	57	51	46	41	36	31	26	23	20	17	14

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	8.5	7.1	6.0	5.0	4.2	3.5	3.0	2.6	2.3	2.0	1.8
1	13 (9.3-23)	11 (7.8-19)	9.3 (6.5-16)	7.8 (5.5-14)	6.5 (4.6-11)	5.4 (3.8-9.6)	4.7 (3.3-8.2)	4.1 (2.8-7.0)	3.5 (2.5-6.0)	3.1 (2.1-5.1)	2.7 (1.9-4.4)
2	19 (12-30)	16 (10-26)	14 (8.8-22)	12 (7.4-19)	9.9 (6.2-16)	8.3 (5.2-14)	7.2 (4.5-12)	6.2 (3.9-10)	5.4 (3.4-8.7)	4.7 (2.9-7.5)	4.1 (2.5-6.5)
3	27 (16-38)	23 (14-33)	20 (12-29)	17 (10-26)	15 (8.4-22)	12 (7.1-19)	11 (6.1-16)	9.4 (5.4-14)	8.2 (4.6-12)	7.1 (4.0-11)	6.1 (3.5-9.2)
4	36 (21-46)	32 (18-41)	28 (16-37)	24 (13-32)	21 (11-28)	18 (9.7-25)	16 (8.4-21)	14 (7.3-19)	12 (6.4-16)	11 (5.5-14)	9.1 (4.8-12)
5	46 (28-52)	41 (24-48)	37 (21-44)	33 (18-39)	29 (16-35)	25 (13-30)	22 (12-27)	20 (10-24)	17 (8.9-21)	15 (7.8-19)	13 (6.8-16)
6	56	52	47	43	39	34	31	28	25	22	19