South Africa (African) - The probabilities of a hip fracture in men

The following tables give the 10-year probability (%) of a hip 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 (African). 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	7.9	4.3	2.3	1.2	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	12 (8.3-16)	6.6 (4.5-8.8)	3.6 (2.4-4.8)	1.9 (1.3-2.6)	1.0 (0.7-1.4)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	18 (12-26)	10 (6.3-15)	5.5 (3.4-8.2)	3.0 (1.8-4.4)	1.6 (1.0-2.4)	0.8 (0.5-1.3)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
3	26 (17-35)	15 (9.4-22)	8.4 (5.1-12)	4.5 (2.7-6.9)	2.4 (1.5-3.7)	1.3 (0.8-2.0)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	35 (25-47)	22 (14-30)	12 (8.0-18)	6.9 (4.4-10)	3.7 (2.3-5.6)	2.0 (1.2-3.0)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
5	46 (37-56)	30 (23-39)	18 (13-24)	10 (7.3-14)	5.6 (4.0-7.9)	3.0 (2.1-4.3)	1.6 (1.1-2.3)	0.9 (0.6-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
6	58	40	25	15	8.3	4.5	2.4	1.3	0.7	0.4	0.2

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

 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	8.0	4.5	2.5	1.4	0.8	0.4	0.2	0.1	0.1	0.0	0.0
1	12 (8.3-15)	6.8 (4.7-8.6)	3.8 (2.6-4.8)	2.1 (1.4-2.7)	1.2 (0.8-1.5)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	17 (12-24)	10 (6.6-14)	5.8 (3.7-8.2)	3.2 (2.0-4.6)	1.8 (1.1-2.6)	1.0 (0.6-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
3	25 (17-33)	15 (9.9-21)	8.6 (5.6-12)	4.9 (3.1-7.0)	2.7 (1.7-4.0)	1.5 (0.9-2.2)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
4	34 (25-44)	21 (15-29)	13 (8.6-18)	7.2 (4.9-10)	4.1 (2.7-6.0)	2.3 (1.5-3.4)	1.3 (0.8-1.9)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
5	44 (36-53)	29 (23-37)	18 (14-24)	11 (8.1-14)	6.0 (4.6-8.4)	3.4 (2.6-4.8)	1.9 (1.4-2.7)	1.0 (0.8-1.5)	0.6 (0.5-0.8)	0.3 (0.3-0.5)	0.2 (0.2-0.3)
6	54	39	25	15	8.8	5.0	2.8	1.6	0.9	0.5	0.3

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	6.8	4.0	2.4	1.4	0.8	0.5	0.3	0.2	0.1	0.1	0.0
1	9.9 (7.1-12)	6.0 (4.2-7.2)	3.6 (2.5-4.3)	2.1 (1.5-2.5)	1.2 (0.9-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	14 (9.9-19)	8.8 (5.9-12)	5.3 (3.5-7.1)	3.1 (2.1-4.3)	1.8 (1.2-2.5)	1.1 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
3	20 (15-27)	13 (8.9-17)	7.7 (5.3-11)	4.6 (3.1-6.4)	2.7 (1.8-3.8)	1.6 (1.1-2.3)	0.9 (0.6-1.3)	0.6 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	28 (21-36)	18 (13-24)	11 (8.1-15)	6.8 (4.9-9.5)	4.0 (2.9-5.8)	2.4 (1.7-3.4)	1.4 (1.0-2.0)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
5	36 (31-45)	25 (20-31)	16 (13-21)	9.7 (7.9-13)	5.9 (4.8-8.0)	3.5 (2.8-4.8)	2.1 (1.7-2.9)	1.2 (1.0-1.7)	0.7 (0.6-1.0)	0.5 (0.4-0.6)	0.3 (0.2-0.4)
6	46	33	22	14	8.4	5.1	3.0	1.8	1.1	0.7	0.4

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

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	5.6	3.5	2.2	1.4	0.9	0.5	0.3	0.2	0.1	0.1	0.1
1	8.1 (5.9-9.2)	5.2 (3.7-5.9)	3.2 (2.3-3.7)	2.0 (1.4-2.3)	1.3 (0.9-1.4)	0.8 (0.6-0.9)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.1-0.1)
2	12 (8.3-15)	7.5 (5.2-9.5)	4.7 (3.3-6.1)	3.0 (2.0-3.8)	1.9 (1.3-2.4)	1.2 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.2)
3	16 (12-21)	11 (7.8-14)	6.8 (5.0-9.0)	4.3 (3.1-5.8)	2.7 (1.9-3.6)	1.7 (1.2-2.3)	1.1 (0.7-1.4)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
4	22 (18-28)	15 (12-19)	9.6 (7.4-13)	6.2 (4.7-8.4)	3.9 (3.0-5.4)	2.5 (1.9-3.4)	1.5 (1.2-2.1)	1.0 (0.7-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
5	29 (26-36)	20 (18-26)	13 (12-18)	8.7 (7.5-12)	5.6 (4.8-7.5)	3.5 (3.0-4.8)	2.2 (1.9-3.0)	1.4 (1.2-1.9)	0.9 (0.8-1.2)	0.6 (0.5-0.8)	0.4 (0.3-0.5)
6	37	27	18	12	7.9	5.0	3.2	2.0	1.3	0.8	0.5

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	4.8	3.2	2.1	1.4	0.9	0.6	0.4	0.3	0.2	0.1	0.1
1	7.6 (6.7-9.9)	5.1 (4.5-6.7)	3.4 (3.0-4.5)	2.3 (2.0-3.0)	1.5 (1.3-1.9)	1.0 (0.9-1.3)	0.6 (0.6-0.8)	0.4 (0.4-0.6)	0.3 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
2	12 (9.7-15)	8.1 (6.6-11)	5.4 (4.4-7.2)	3.6 (2.9-4.8)	2.4 (1.9-3.2)	1.6 (1.3-2.1)	1.0 (0.8-1.4)	0.7 (0.6-0.9)	0.5 (0.4-0.6)	0.3 (0.3-0.4)	0.2 (0.2-0.3)
3	18 (14-22)	12 (9.8-16)	8.5 (6.6-11)	5.7 (4.4-7.3)	3.8 (2.9-4.9)	2.5 (2.0-3.3)	1.7 (1.3-2.2)	1.1 (0.9-1.5)	0.8 (0.6-1.0)	0.5 (0.4-0.7)	0.4 (0.3-0.5)
4	26 (21-31)	19 (15-22)	13 (10.0-16)	8.9 (6.7-11)	6.0 (4.5-7.3)	4.0 (3.0-4.9)	2.7 (2.0-3.3)	1.8 (1.3-2.2)	1.2 (0.9-1.5)	0.8 (0.6-1.0)	0.6 (0.4-0.7)
5	36 (29-39)	27 (21-29)	19 (15-21)	14 (10-15)	9.4 (7.1-10)	6.3 (4.8-7.1)	4.3 (3.2-4.8)	2.9 (2.2-3.2)	2.0 (1.5-2.2)	1.4 (1.0-1.5)	0.9 (0.7-1.0)
6	47	37	28	20	14	9.8	6.7	4.6	3.1	2.2	1.5

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

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	4.1	2.8	2.0	1.4	1.0	0.7	0.5	0.3	0.2	0.2	0.1
1	7.6 (5.7-16)	5.4 (4.0-12)	3.8 (2.8-8.3)	2.7 (2.0-5.9)	1.9 (1.4-4.1)	1.3 (0.9-2.9)	0.9 (0.7-2.0)	0.6 (0.5-1.4)	0.5 (0.3-1.0)	0.3 (0.2-0.7)	0.2 (0.2-0.5)
2	13 (8.0-24)	9.6 (5.7-18)	6.9 (4.0-13)	4.9 (2.8-9.2)	3.4 (1.9-6.5)	2.4 (1.3-4.6)	1.7 (0.9-3.2)	1.2 (0.7-2.3)	0.9 (0.5-1.7)	0.6 (0.3-1.2)	0.4 (0.2-0.9)
3	21 (11-32)	16 (8.1-25)	12 (5.7-19)	8.4 (4.0-14)	6.0 (2.8-9.7)	4.2 (2.0-6.9)	3.0 (1.4-4.9)	2.1 (1.0-3.5)	1.5 (0.7-2.5)	1.1 (0.5-1.8)	0.8 (0.4-1.3)
4	32 (16-41)	25 (12-32)	19 (8.5-25)	14 (6.1-18)	9.9 (4.3-13)	7.1 (3.0-9.7)	5.0 (2.1-6.9)	3.7 (1.5-5.0)	2.6 (1.1-3.7)	1.9 (0.8-2.7)	1.4 (0.6-1.9)
5	44 (23-50)	36 (17-41)	28 (13-32)	21 (9.2-25)	16 (6.6-18)	12 (4.7-13)	8.3 (3.3-9.7)	6.1 (2.4-7.1)	4.4 (1.7-5.2)	3.2 (1.3-3.8)	2.3 (0.9-2.7)
6	56	48	40	31	24	18	13	9.9	7.3	5.3	3.9

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	3.3	2.4	1.8	1.3	1.0	0.7	0.5	0.4	0.3	0.2	0.2
1	6.2 (4.3-13)	4.6 (3.2-10)	3.4 (2.4-7.5)	2.5 (1.7-5.6)	1.8 (1.3-4.1)	1.4 (0.9-3.0)	1.0 (0.7-2.2)	0.8 (0.5-1.7)	0.6 (0.4-1.3)	0.4 (0.3-1.0)	0.3 (0.2-0.7)
2	11 (6.0-19)	8.0 (4.5-15)	6.0 (3.3-11)	4.5 (2.4-8.6)	3.3 (1.8-6.4)	2.4 (1.3-4.8)	1.8 (1.0-3.5)	1.4 (0.7-2.7)	1.0 (0.5-2.1)	0.8 (0.4-1.6)	0.6 (0.3-1.2)
3	17 (8.4-27)	13 (6.3-21)	10.0 (4.7-16)	7.5 (3.5-13)	5.6 (2.6-9.5)	4.2 (1.9-7.1)	3.1 (1.4-5.3)	2.4 (1.1-4.1)	1.8 (0.8-3.1)	1.4 (0.6-2.4)	1.0 (0.5-1.8)
4	25 (12-35)	20 (9.2-28)	16 (7.0-22)	12 (5.2-17)	9.2 (3.9-13)	6.9 (2.9-9.9)	5.2 (2.1-7.5)	4.0 (1.6-5.7)	3.0 (1.2-4.4)	2.3 (0.9-3.3)	1.8 (0.7-2.5)
5	36 (17-41)	29 (13-34)	24 (10-28)	19 (7.8-22)	14 (5.8-17)	11 (4.4-13)	8.4 (3.3-10)	6.5 (2.5-7.9)	5.0 (1.9-6.1)	3.8 (1.5-4.7)	2.9 (1.1-3.6)
6	47	40	34	27	22	17	13	10	7.9	6.1	4.7

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

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	2.8	2.1	1.7	1.3	1.0	0.8	0.6	0.5	0.4	0.3	0.2
1	5.1 (3.6-11)	4.0 (2.8-8.9)	3.1 (2.2-7.0)	2.4 (1.7-5.4)	1.9 (1.3-4.2)	1.5 (1.0-3.3)	1.1 (0.8-2.6)	0.9 (0.6-2.0)	0.7 (0.5-1.6)	0.6 (0.4-1.3)	0.5 (0.3-1.0)
2	8.8 (4.9-16)	6.9 (3.8-13)	5.5 (3.0-10)	4.3 (2.3-8.1)	3.3 (1.8-6.4)	2.6 (1.4-5.0)	2.0 (1.1-4.0)	1.6 (0.9-3.2)	1.3 (0.7-2.5)	1.0 (0.6-2.0)	0.8 (0.4-1.6)
3	14 (6.8-23)	11 (5.4-18)	9.0 (4.2-15)	7.2 (3.3-12)	5.6 (2.6-9.5)	4.4 (2.0-7.5)	3.5 (1.6-5.9)	2.8 (1.3-4.8)	2.2 (1.0-3.8)	1.8 (0.8-3.1)	1.4 (0.6-2.5)
4	21 (9.7-29)	17 (7.7-24)	14 (6.1-20)	11 (4.8-16)	9.1 (3.8-13)	7.2 (3.0-10)	5.7 (2.3-8.3)	4.6 (1.9-6.7)	3.7 (1.5-5.4)	3.0 (1.2-4.3)	2.4 (1.0-3.5)
5	30 (14-35)	25 (11-30)	21 (9.0-25)	17 (7.2-20)	14 (5.7-17)	11 (4.4-13)	9.1 (3.5-11)	7.4 (2.8-8.9)	6.0 (2.3-7.3)	4.8 (1.8-5.9)	3.9 (1.5-4.8)
6	41	35	30	25	21	17	14	11	9.4	7.6	6.2

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	2.4	1.9	1.6	1.3	1.0	0.8	0.7	0.6	0.5	0.4	0.3
1	4.4 (3.1-9.7)	3.6 (2.5-8.0)	2.9 (2.1-6.6)	2.4 (1.7-5.4)	2.0 (1.4-4.4)	1.6 (1.1-3.6)	1.3 (0.9-3.0)	1.1 (0.8-2.5)	0.9 (0.6-2.1)	0.8 (0.5-1.7)	0.6 (0.4-1.4)
2	7.5 (4.1-14)	6.2 (3.4-12)	5.1 (2.8-9.7)	4.2 (2.3-8.0)	3.4 (1.8-6.6)	2.8 (1.5-5.4)	2.3 (1.3-4.5)	2.0 (1.1-3.8)	1.6 (0.9-3.2)	1.4 (0.7-2.7)	1.1 (0.6-2.2)
3	12 (5.8-20)	10 (4.7-17)	8.4 (3.9-14)	7.0 (3.2-12)	5.7 (2.6-9.6)	4.7 (2.1-7.9)	4.0 (1.8-6.7)	3.3 (1.5-5.7)	2.8 (1.2-4.8)	2.4 (1.0-4.0)	2.0 (0.9-3.4)
4	18 (8.2-26)	16 (6.8-22)	13 (5.6-19)	11 (4.6-16)	9.2 (3.8-13)	7.6 (3.1-11)	6.4 (2.6-9.3)	5.4 (2.2-7.9)	4.6 (1.9-6.7)	3.9 (1.6-5.6)	3.3 (1.3-4.7)
5	27 (12-31)	23 (10.0-27)	20 (8.3-23)	17 (6.9-20)	14 (5.7-17)	12 (4.7-14)	10 (3.9-12)	8.6 (3.3-10)	7.3 (2.8-8.8)	6.2 (2.4-7.5)	5.2 (2.0-6.3)
6	37	32	28	24	21	18	15	13	11	9.6	8.2