

South Africa (Indian) - 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 (Indian). 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	16	10	6.5	4.4	3.2	2.5	2.1	1.8	1.6	1.5	1.4
1	24 (20-31)	15 (13-19)	9.9 (8.7-13)	6.8 (5.6-8.6)	4.9 (3.8-6.3)	3.8 (2.8-4.8)	3.1 (2.2-4.1)	2.7 (1.8-3.6)	2.4 (1.5-3.3)	2.3 (1.4-3.1)	2.2 (1.4-3.0)
2	34 (26-46)	22 (17-31)	15 (12-21)	10 (7.6-14)	7.4 (5.1-11)	5.7 (3.6-8.9)	4.6 (2.7-7.6)	3.9 (2.2-6.6)	3.5 (1.9-6.1)	3.3 (1.7-5.8)	3.2 (1.6-5.6)
3	47 (35-59)	32 (23-41)	21 (15-28)	15 (10-21)	11 (6.8-17)	8.3 (4.8-14)	6.7 (3.6-12)	5.7 (2.8-10)	5.1 (2.4-9.5)	4.8 (2.2-9.1)	4.6 (2.1-8.8)
4	60 (46-71)	43 (31-53)	30 (21-37)	21 (14-27)	15 (10-22)	12 (7.8-18)	9.6 (5.8-15)	8.1 (4.6-13)	7.2 (3.9-12)	6.8 (3.5-12)	6.5 (3.3-11)
5	72 (63-79)	56 (46-64)	41 (32-46)	29 (22-34)	22 (16-26)	17 (12-21)	13 (10-18)	11 (8.4-16)	10 (7.2-14)	9.5 (6.6-14)	9.0 (6.2-13)
6	81	68	53	39	29	23	18	15	14	13	12

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

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	19	12	8.2	5.7	4.2	3.3	2.6	2.2	2.0	1.9	1.8
1	28 (24-33)	18 (17-22)	12 (11-15)	8.6 (7.1-11)	6.3 (4.9-7.8)	4.9 (3.6-6.0)	3.9 (2.8-5.1)	3.3 (2.2-4.4)	3.0 (1.9-4.1)	2.8 (1.8-3.9)	2.6 (1.7-3.7)
2	38 (31-49)	26 (21-34)	18 (14-24)	13 (9.6-17)	9.3 (6.6-13)	7.1 (4.7-11)	5.8 (3.5-9.1)	4.8 (2.7-7.9)	4.3 (2.4-7.3)	4.0 (2.1-6.9)	3.8 (2.0-6.6)
3	50 (39-61)	36 (27-45)	25 (19-32)	18 (13-25)	13 (8.9-20)	10 (6.2-17)	8.3 (4.6-14)	6.9 (3.6-12)	6.2 (3.1-11)	5.7 (2.8-11)	5.4 (2.6-10)
4	62 (50-71)	47 (36-55)	34 (25-40)	25 (18-32)	19 (13-26)	14 (10.0-21)	12 (7.4-18)	9.7 (5.7-16)	8.7 (4.8-14)	8.1 (4.3-14)	7.6 (4.0-13)
5	72 (65-78)	59 (51-65)	45 (37-50)	34 (27-39)	26 (20-31)	20 (15-25)	16 (12-21)	13 (10-18)	12 (8.7-17)	11 (7.8-16)	10 (7.2-15)
6	80	70	57	44	34	27	22	18	16	15	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	20	14	9.7	7.0	5.3	4.1	3.3	2.7	2.5	2.3	2.1
1	28 (25-33)	20 (18-23)	14 (12-17)	10 (8.5-12)	7.7 (6.1-9.2)	6.0 (4.5-7.4)	4.8 (3.4-6.2)	4.0 (2.7-5.3)	3.6 (2.4-5.0)	3.3 (2.2-4.6)	3.1 (2.0-4.4)
2	38 (31-47)	28 (23-35)	20 (16-26)	15 (11-19)	11 (8.1-15)	8.7 (5.8-13)	7.0 (4.4-11)	5.8 (3.4-9.2)	5.2 (2.9-8.6)	4.8 (2.6-8.0)	4.5 (2.4-7.6)
3	49 (40-58)	37 (29-45)	28 (21-35)	21 (16-28)	16 (11-23)	12 (7.8-19)	9.9 (5.8-16)	8.2 (4.5-14)	7.4 (3.9-13)	6.8 (3.4-12)	6.3 (3.1-12)
4	60 (50-67)	48 (38-55)	37 (28-43)	28 (21-35)	21 (16-29)	17 (12-24)	14 (9.2-21)	11 (7.1-18)	10 (6.0-17)	9.4 (5.3-16)	8.7 (4.8-15)
5	69 (63-73)	58 (51-62)	47 (40-52)	37 (30-42)	29 (23-35)	23 (18-29)	18 (15-24)	15 (12-21)	14 (10-19)	13 (9.1-18)	12 (8.2-17)
6	76	67	57	46	37	30	24	20	18	17	16

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

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	19	14	10	7.5	5.8	4.5	3.7	3.1	2.7	2.5	2.3
1	26 (25-30)	19 (17-22)	14 (12-16)	11 (8.9-12)	8.3 (6.5-9.7)	6.6 (4.9-8.1)	5.3 (3.8-6.8)	4.4 (3.1-5.9)	4.0 (2.7-5.4)	3.6 (2.4-5.0)	3.3 (2.1-4.7)
2	35 (29-42)	27 (22-32)	20 (17-25)	15 (12-19)	12 (8.8-16)	9.3 (6.5-13)	7.5 (4.9-11)	6.3 (3.9-9.8)	5.6 (3.3-9.0)	5.1 (2.9-8.4)	4.7 (2.6-7.8)
3	45 (37-52)	35 (29-42)	27 (22-34)	21 (16-28)	16 (12-23)	13 (8.7-20)	10 (6.5-17)	8.8 (5.2-15)	7.9 (4.4-14)	7.2 (3.8-13)	6.6 (3.4-12)
4	55 (47-62)	45 (37-51)	35 (28-42)	28 (22-35)	22 (17-29)	18 (13-25)	14 (10-21)	12 (7.9-19)	11 (6.7-17)	9.8 (5.8-16)	9.0 (5.1-15)
5	64 (59-68)	54 (49-59)	44 (39-50)	36 (31-42)	29 (24-35)	23 (19-30)	19 (16-25)	16 (13-22)	14 (11-20)	13 (9.6-19)	12 (8.5-17)
6	71	63	54	45	37	30	25	21	19	17	16

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	17	13	9.8	7.5	5.9	4.7	3.8	3.2	2.9	2.6	2.3
1	24 (21-30)	18 (15-23)	14 (11-17)	11 (8.6-13)	8.4 (6.5-10)	6.6 (5.0-8.0)	5.3 (3.9-6.4)	4.5 (3.2-5.4)	3.9 (2.8-4.7)	3.5 (2.4-4.2)	3.2 (2.2-3.8)
2	33 (27-41)	26 (20-33)	20 (15-26)	15 (12-20)	12 (8.7-16)	9.3 (6.6-13)	7.4 (5.1-10)	6.2 (4.1-8.6)	5.4 (3.5-7.5)	4.8 (3.0-6.7)	4.3 (2.7-6.0)
3	44 (36-53)	35 (27-44)	28 (21-36)	21 (16-29)	17 (12-23)	13 (8.9-19)	10 (6.8-15)	8.6 (5.5-13)	7.4 (4.6-11)	6.5 (4.0-10)	5.8 (3.5-9.0)
4	55 (46-62)	46 (37-54)	37 (29-45)	29 (22-36)	23 (17-29)	18 (13-24)	14 (10-19)	12 (8.2-16)	10 (6.9-14)	8.7 (5.9-13)	7.7 (5.2-12)
5	65 (58-70)	56 (49-62)	47 (40-53)	39 (32-45)	31 (25-37)	25 (20-30)	19 (16-24)	16 (13-20)	13 (11-18)	12 (9.4-16)	10 (8.3-14)
6	73	66	58	49	40	33	26	21	18	15	13

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

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	9.7	7.7	6.2	5.0	4.0	3.5	3.1	2.7	2.4
1	24 (18-39)	19 (14-31)	15 (11-24)	12 (8.5-19)	9.2 (6.6-14)	7.3 (5.2-11)	5.8 (4.1-8.3)	4.9 (3.5-6.6)	4.2 (3.0-5.4)	3.7 (2.6-4.5)	3.3 (2.3-3.8)
2	34 (24-49)	28 (19-41)	22 (15-33)	17 (11-27)	14 (8.9-21)	11 (6.9-16)	8.5 (5.4-12)	7.0 (4.5-10)	5.9 (3.8-8.2)	5.1 (3.3-6.8)	4.4 (2.8-5.7)
3	46 (32-59)	38 (25-51)	31 (20-43)	25 (15-35)	20 (12-28)	16 (9.3-22)	12 (7.3-18)	10 (6.0-15)	8.4 (5.1-12)	7.1 (4.3-10)	6.0 (3.7-8.6)
4	57 (40-67)	50 (33-60)	42 (27-52)	35 (21-44)	28 (17-37)	23 (13-29)	18 (11-23)	14 (8.7-19)	12 (7.4-16)	9.9 (6.3-13)	8.3 (5.4-11)
5	67 (49-73)	61 (42-67)	54 (35-61)	46 (29-53)	39 (24-45)	31 (19-37)	25 (15-30)	20 (13-25)	17 (11-21)	14 (9.5-17)	11 (8.3-14)
6	75	70	64	58	50	42	35	28	23	19	16

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	15	12	9.7	7.8	6.3	5.1	4.2	3.7	3.2	2.8	2.5
1	22 (17-36)	18 (13-30)	15 (11-24)	12 (8.5-19)	9.4 (6.8-15)	7.6 (5.4-12)	6.2 (4.4-9.4)	5.3 (3.7-7.7)	4.5 (3.2-6.4)	3.9 (2.7-5.3)	3.4 (2.4-4.4)
2	31 (22-46)	26 (18-39)	21 (14-32)	17 (11-26)	14 (9.1-21)	11 (7.3-17)	9.1 (5.9-14)	7.6 (4.9-11)	6.5 (4.2-9.5)	5.5 (3.6-7.9)	4.7 (3.1-6.6)
3	41 (28-54)	35 (23-48)	30 (19-41)	24 (15-35)	20 (12-29)	16 (9.8-23)	13 (7.9-19)	11 (6.6-15)	9.2 (5.6-13)	7.8 (4.7-11)	6.6 (4.1-9.3)
4	51 (35-62)	45 (30-56)	39 (25-49)	33 (20-43)	28 (16-36)	23 (13-30)	19 (11-24)	16 (9.2-20)	13 (7.9-17)	11 (6.8-14)	9.2 (5.8-12)
5	61 (43-68)	56 (37-63)	50 (32-57)	43 (27-50)	37 (22-44)	31 (18-37)	26 (15-31)	22 (13-26)	18 (11-22)	15 (9.6-19)	13 (8.3-16)
6	70	66	60	54	48	41	35	30	25	21	18

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

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	14	11	9.4	7.8	6.4	5.3	4.5	3.9	3.4	2.9	2.6
1	20 (15-34)	17 (12-29)	14 (10-24)	12 (8.4-20)	9.7 (6.9-16)	8.0 (5.6-13)	6.7 (4.7-11)	5.7 (4.0-9.2)	4.9 (3.4-7.7)	4.3 (3.0-6.5)	3.7 (2.6-5.4)
2	28 (20-43)	24 (16-37)	21 (14-32)	17 (11-27)	14 (9.2-22)	12 (7.6-18)	9.9 (6.3-15)	8.5 (5.4-13)	7.3 (4.6-11)	6.2 (4.0-9.4)	5.3 (3.4-8.0)
3	38 (25-51)	33 (21-45)	29 (18-40)	24 (15-34)	21 (12-29)	17 (10-25)	14 (8.6-21)	12 (7.3-18)	11 (6.2-15)	9.0 (5.3-13)	7.7 (4.6-11)
4	48 (32-58)	43 (27-53)	38 (23-48)	33 (20-42)	28 (17-37)	24 (14-32)	21 (12-27)	18 (10-23)	15 (8.6-20)	13 (7.5-17)	11 (6.4-15)
5	58 (39-64)	53 (35-60)	48 (30-55)	43 (26-49)	37 (22-44)	33 (18-39)	28 (16-34)	25 (14-30)	21 (12-26)	18 (10-22)	16 (9.0-19)
6	67	63	58	53	48	42	37	33	29	25	22

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	13	11	9.0	7.5	6.3	5.3	4.6	4.0	3.5	3.0	2.7
1	19 (14-32)	16 (12-28)	14 (9.9-24)	12 (8.3-21)	9.8 (7.0-17)	8.3 (5.8-15)	7.1 (5.0-13)	6.2 (4.4-11)	5.4 (3.8-9.4)	4.7 (3.3-8.1)	4.1 (2.9-6.9)
2	27 (18-41)	23 (15-36)	20 (13-32)	17 (11-28)	15 (9.4-24)	13 (7.9-20)	11 (6.8-18)	9.5 (5.9-15)	8.3 (5.2-13)	7.2 (4.5-12)	6.2 (3.9-10)
3	36 (23-49)	32 (20-44)	28 (17-40)	25 (15-35)	21 (13-31)	18 (11-27)	16 (9.3-24)	14 (8.1-21)	12 (7.1-18)	11 (6.2-16)	9.4 (5.4-14)
4	46 (29-56)	41 (26-52)	37 (22-47)	33 (19-43)	29 (17-38)	26 (14-34)	23 (13-30)	20 (11-27)	18 (9.7-24)	16 (8.4-21)	14 (7.3-19)
5	56 (37-62)	52 (33-58)	47 (29-54)	43 (26-50)	39 (22-45)	35 (19-41)	31 (17-37)	28 (15-34)	25 (13-30)	22 (12-27)	20 (10-24)
6	65	61	58	54	49	45	41	37	34	31	27