

**South Africa (White) - 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 (White). 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/m<sup>2</sup>

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	5.9	3.9	2.8	2.1	1.7	1.5	1.3	1.2	1.2	1.1
1	15 (13-19)	9.2 (8.1-12)	6.1 (5.2-7.7)	4.3 (3.4-5.4)	3.3 (2.4-4.1)	2.6 (1.8-3.4)	2.2 (1.5-2.9)	2.0 (1.3-2.7)	1.9 (1.2-2.6)	1.8 (1.1-2.5)	1.7 (1.1-2.4)
2	22 (17-32)	14 (11-20)	9.3 (7.1-13)	6.5 (4.6-9.2)	4.9 (3.1-7.5)	3.9 (2.3-6.3)	3.3 (1.8-5.5)	2.9 (1.6-5.0)	2.8 (1.4-4.8)	2.6 (1.4-4.6)	2.5 (1.3-4.4)
3	32 (23-45)	21 (15-28)	14 (9.8-20)	9.7 (6.2-15)	7.3 (4.2-12)	5.8 (3.1-10)	4.8 (2.4-8.8)	4.3 (2.0-8.1)	4.0 (1.9-7.7)	3.8 (1.7-7.4)	3.7 (1.7-7.1)
4	45 (31-58)	30 (20-38)	20 (13-25)	14 (9.2-19)	11 (6.9-16)	8.4 (5.2-13)	6.9 (4.0-11)	6.2 (3.4-10)	5.8 (3.1-9.9)	5.5 (2.9-9.5)	5.3 (2.7-9.1)
5	60 (49-70)	42 (33-49)	29 (22-32)	20 (15-24)	15 (11-19)	12 (9.0-16)	9.8 (7.4-13)	8.7 (6.4-12)	8.2 (5.7-12)	7.8 (5.3-11)	7.4 (5.0-11)
6	75	56	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 (White).**

**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	7.4	5.1	3.7	2.9	2.3	1.9	1.8	1.6	1.5	1.5
1	17 (15-21)	11 (10.0-14)	7.8 (6.6-9.4)	5.7 (4.5-6.9)	4.4 (3.3-5.4)	3.5 (2.5-4.5)	2.9 (2.0-3.9)	2.6 (1.8-3.6)	2.5 (1.6-3.4)	2.3 (1.5-3.2)	2.2 (1.4-3.1)
2	25 (20-34)	17 (14-23)	12 (9.0-16)	8.5 (6.0-12)	6.5 (4.2-9.7)	5.2 (3.1-8.1)	4.3 (2.5-7.0)	3.9 (2.1-6.5)	3.6 (1.9-6.1)	3.4 (1.8-5.8)	3.2 (1.7-5.5)
3	36 (26-46)	24 (18-31)	17 (12-24)	12 (8.1-19)	9.5 (5.7-16)	7.6 (4.2-13)	6.3 (3.2-11)	5.7 (2.8-10)	5.3 (2.5-9.9)	4.9 (2.3-9.3)	4.7 (2.2-8.9)
4	49 (35-60)	34 (24-41)	24 (17-31)	18 (12-24)	14 (9.2-20)	11 (7.0-17)	8.9 (5.4-14)	8.1 (4.6-13)	7.5 (4.1-13)	7.0 (3.8-12)	6.6 (3.5-11)
5	63 (54-71)	46 (39-52)	34 (27-38)	25 (20-30)	19 (15-24)	15 (12-20)	13 (9.8-17)	11 (8.3-16)	10 (7.4-15)	9.8 (6.8-14)	9.3 (6.3-13)
6	77	60	45	34	26	21	17	16	14	13	13

**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	2.0	1.9
1	20 (18-23)	14 (13-16)	10 (8.5-12)	7.5 (5.9-8.8)	5.8 (4.4-7.2)	4.6 (3.3-6.0)	3.9 (2.7-5.3)	3.6 (2.4-4.9)	3.3 (2.2-4.6)	3.0 (2.0-4.3)	2.8 (1.8-4.0)
2	29 (24-37)	20 (17-27)	15 (11-19)	11 (7.9-15)	8.5 (5.6-12)	6.8 (4.2-10)	5.8 (3.4-9.2)	5.2 (2.9-8.5)	4.8 (2.6-7.9)	4.4 (2.4-7.4)	4.1 (2.2-6.9)
3	40 (32-49)	29 (22-37)	21 (15-29)	16 (11-24)	12 (7.5-20)	9.8 (5.6-17)	8.3 (4.4-15)	7.5 (3.8-13)	6.9 (3.4-13)	6.4 (3.1-12)	5.9 (2.8-11)
4	53 (41-62)	40 (29-46)	29 (21-37)	22 (16-30)	17 (12-25)	14 (9.3-21)	12 (7.3-19)	11 (6.3-17)	9.7 (5.5-16)	9.0 (5.0-15)	8.4 (4.6-14)
5	67 (60-74)	52 (45-57)	40 (34-45)	30 (25-36)	24 (20-30)	19 (16-25)	16 (13-22)	15 (11-20)	13 (9.6-19)	12 (8.6-17)	12 (7.9-16)
6	80	66	52	41	32	26	22	20	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 (White).**

**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	16	11	8.3	6.3	4.9	3.9	3.4	3.0	2.7	2.5	2.3
1	23 (21-26)	17 (15-19)	12 (10-14)	9.3 (7.4-11)	7.2 (5.5-9.1)	5.8 (4.2-7.5)	5.0 (3.5-6.7)	4.5 (3.1-6.1)	4.0 (2.7-5.6)	3.7 (2.4-5.2)	3.4 (2.2-4.8)
2	32 (28-40)	24 (20-30)	18 (14-22)	13 (9.7-18)	10 (7.1-15)	8.4 (5.3-12)	7.3 (4.4-11)	6.5 (3.7-10)	5.9 (3.3-9.5)	5.3 (2.9-8.7)	4.9 (2.6-8.1)
3	44 (36-52)	33 (26-42)	25 (18-34)	19 (13-28)	15 (9.4-23)	12 (7.0-20)	10 (5.7-18)	9.2 (4.9-16)	8.3 (4.3-15)	7.6 (3.8-14)	7.0 (3.4-13)
4	57 (46-63)	44 (34-52)	34 (26-43)	26 (19-35)	21 (15-29)	17 (12-25)	14 (9.4-22)	13 (8.0-20)	12 (6.9-19)	11 (6.1-17)	9.8 (5.5-16)
5	70 (64-74)	57 (50-61)	45 (39-51)	35 (31-42)	28 (24-35)	23 (19-29)	20 (15-26)	18 (13-24)	16 (12-22)	15 (10-20)	13 (9.3-19)
6	81	69	57	46	37	30	27	24	22	20	18

**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	19	14	10	7.9	6.2	5.0	4.3	3.8	3.4	3.0	2.7
1	28 (25-33)	20 (18-24)	15 (13-18)	11 (9.2-13)	8.8 (6.9-10)	7.1 (5.4-8.2)	6.1 (4.5-7.0)	5.3 (3.9-6.2)	4.7 (3.4-5.5)	4.2 (3.0-5.0)	3.8 (2.7-4.5)
2	39 (32-49)	29 (23-38)	22 (17-28)	16 (12-22)	13 (8.9-17)	10 (6.9-13)	8.5 (5.6-11)	7.4 (4.7-10.0)	6.5 (4.1-8.9)	5.8 (3.6-8.0)	5.2 (3.2-7.2)
3	54 (43-65)	41 (31-52)	31 (22-41)	23 (16-32)	18 (12-25)	14 (9.1-21)	12 (7.4-18)	10 (6.2-16)	8.8 (5.3-14)	7.8 (4.7-12)	7.0 (4.1-11)
4	69 (58-76)	55 (44-63)	43 (33-51)	33 (24-41)	25 (18-32)	20 (14-26)	16 (12-23)	14 (10.0-20)	12 (8.6-18)	11 (7.5-16)	9.4 (6.5-14)
5	82 (76-85)	70 (63-74)	57 (49-62)	44 (38-50)	34 (29-40)	27 (23-32)	22 (19-27)	19 (16-24)	16 (14-21)	14 (12-19)	13 (10-17)
6	90	83	71	58	46	37	30	25	22	19	17

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

**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	23	17	13	10.0	7.7	6.4	5.5	4.7	4.1	3.6	3.2
1	35 (29-51)	26 (21-39)	20 (16-28)	15 (12-21)	11 (8.7-15)	9.2 (7.0-11)	7.7 (5.8-9.0)	6.5 (4.9-7.6)	5.6 (4.2-6.7)	4.9 (3.6-5.9)	4.3 (3.2-5.2)
2	50 (37-70)	38 (28-57)	29 (21-44)	22 (15-33)	17 (11-24)	13 (9.0-19)	11 (7.3-15)	9.0 (6.1-12)	7.6 (5.1-10)	6.5 (4.4-9.2)	5.7 (3.8-8.2)
3	66 (48-81)	54 (36-70)	42 (27-57)	32 (20-44)	24 (15-34)	19 (12-27)	15 (9.6-22)	13 (7.9-18)	10 (6.7-15)	8.8 (5.7-12)	7.5 (4.9-11)
4	80 (61-88)	70 (48-80)	58 (37-69)	46 (29-56)	35 (22-43)	28 (18-35)	22 (14-28)	18 (12-23)	14 (10-19)	12 (8.9-16)	10 (7.5-14)
5	88 (77-92)	83 (66-87)	74 (54-79)	62 (43-67)	49 (34-54)	39 (27-44)	31 (23-35)	25 (19-29)	20 (16-24)	16 (14-20)	14 (11-17)
6	92	91	86	77	65	54	43	35	28	22	18

**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	26	20	15	12	9.3	7.7	6.5	5.5	4.7	4.0	3.5
1	38 (32-56)	30 (25-44)	23 (18-34)	17 (14-25)	14 (11-19)	11 (8.6-15)	9.2 (7.0-12)	7.6 (5.8-9.2)	6.4 (4.9-7.5)	5.5 (4.1-6.5)	4.7 (3.5-5.6)
2	53 (41-73)	43 (32-62)	33 (24-50)	26 (18-39)	20 (14-30)	16 (11-24)	13 (9.0-19)	11 (7.3-15)	8.9 (6.1-12)	7.5 (5.1-9.9)	6.3 (4.3-8.5)
3	68 (52-82)	57 (41-73)	47 (32-62)	37 (24-50)	29 (18-39)	23 (15-32)	19 (12-26)	15 (9.7-21)	12 (8.0-17)	10 (6.6-14)	8.6 (5.6-12)
4	80 (63-87)	72 (51-82)	62 (41-73)	51 (32-62)	41 (25-50)	33 (20-41)	27 (17-33)	22 (14-27)	17 (12-22)	14 (9.8-18)	12 (8.3-15)
5	87 (76-90)	83 (67-87)	76 (57-81)	66 (47-72)	55 (38-61)	46 (31-51)	38 (26-42)	30 (22-34)	24 (18-28)	20 (15-23)	16 (13-19)
6	91	89	86	79	71	61	51	42	34	27	22

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

**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	29	22	17	13	11	8.8	7.3	6.0	5.0	4.2	3.6
1	42 (35-61)	33 (27-50)	26 (21-40)	20 (16-31)	16 (13-24)	13 (10-19)	11 (8.3-15)	8.8 (6.7-12)	7.2 (5.5-9.5)	6.0 (4.5-7.6)	5.0 (3.8-6.1)
2	56 (44-75)	47 (35-66)	38 (28-56)	30 (21-46)	24 (17-37)	20 (14-30)	16 (11-24)	13 (8.8-19)	10 (7.1-16)	8.6 (5.8-12)	7.1 (4.8-10.0)
3	69 (54-82)	61 (45-76)	52 (36-67)	42 (28-57)	35 (22-48)	29 (18-40)	23 (15-32)	19 (12-26)	15 (9.5-21)	12 (7.7-17)	10 (6.3-14)
4	79 (65-86)	73 (55-82)	66 (46-76)	57 (37-68)	48 (30-59)	41 (24-50)	33 (20-41)	27 (16-34)	22 (13-28)	18 (11-23)	14 (9.2-18)
5	85 (76-89)	82 (69-86)	77 (60-82)	70 (51-76)	63 (43-69)	55 (36-60)	46 (30-52)	39 (25-43)	32 (21-36)	26 (17-29)	21 (14-24)
6	89	87	85	81	76	69	61	52	44	36	29

**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	29	23	18	14	11	9.3	7.6	6.2	5.1	4.1	3.4
1	42 (36-63)	34 (29-54)	28 (23-44)	22 (18-36)	18 (14-30)	15 (12-24)	12 (9.4-20)	9.8 (7.6-16)	7.9 (6.1-12)	6.4 (5.0-9.9)	5.2 (4.0-7.9)
2	56 (44-74)	48 (36-67)	40 (29-59)	33 (24-51)	28 (19-44)	23 (16-37)	19 (13-30)	15 (10-25)	12 (8.3-20)	10.0 (6.7-16)	8.1 (5.4-13)
3	68 (54-81)	62 (46-76)	54 (38-70)	46 (31-63)	40 (26-55)	34 (21-48)	28 (17-40)	23 (14-34)	19 (11-28)	15 (9.1-22)	12 (7.3-18)
4	78 (64-85)	73 (56-82)	67 (48-77)	60 (40-72)	54 (34-65)	47 (28-58)	40 (23-51)	34 (19-44)	28 (15-37)	23 (13-30)	19 (10-25)
5	84 (73-87)	81 (68-85)	77 (61-82)	72 (54-78)	67 (47-73)	61 (40-67)	55 (34-61)	48 (29-54)	41 (24-46)	34 (20-39)	28 (16-32)
6	87	86	84	81	78	74	69	62	55	48	40