

South Africa (African) - 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 body mass index (BMI kg/m²), 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.

Age = 50 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	1.4	1.2	1.2	1.0	0.9	0.8	0.7
1	2.3 (1.6-3.5)	2.0 (1.3-2.9)	1.8 (1.2-2.6)	1.6 (1.1-2.2)	1.4 (0.9-1.9)	1.2 (0.8-1.7)	1.0 (0.7-1.4)
2	3.7 (2.0-6.2)	3.2 (1.7-5.3)	2.9 (1.5-4.9)	2.5 (1.3-4.3)	2.1 (1.1-3.7)	1.9 (1.0-3.2)	1.6 (0.8-2.8)
3	6.1 (3.1-10)	5.0 (2.5-8.8)	4.4 (2.1-8.0)	3.8 (1.8-7.0)	3.3 (1.6-6.1)	2.8 (1.3-5.3)	2.5 (1.2-4.6)
4	9.7 (5.1-15)	7.9 (4.3-12)	6.8 (3.6-11)	5.8 (3.1-9.6)	5.0 (2.6-8.3)	4.3 (2.2-7.2)	3.7 (1.9-6.2)
5	15 (8.8-20)	12 (7.4-16)	10 (6.6-14)	8.8 (5.7-12)	7.5 (4.9-10)	6.5 (4.2-8.8)	5.6 (3.7-7.6)
6	23	18	15	13	11	9.6	8.2

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

Age = 55 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	1.8	1.6	1.4	1.2	1.1	0.9	0.8
1	3.0 (2.1-4.6)	2.5 (1.8-3.7)	2.3 (1.5-3.1)	1.9 (1.3-2.7)	1.7 (1.1-2.3)	1.4 (1.0-2.0)	1.3 (0.9-1.7)
2	5.0 (2.9-8.1)	4.1 (2.3-6.5)	3.5 (1.9-5.9)	3.0 (1.7-5.1)	2.6 (1.4-4.4)	2.3 (1.2-3.8)	1.9 (1.0-3.3)
3	8.1 (4.5-13)	6.4 (3.4-11)	5.5 (2.8-9.6)	4.7 (2.4-8.3)	4.0 (2.0-7.2)	3.5 (1.7-6.2)	3.0 (1.5-5.4)
4	13 (7.1-19)	10 (5.8-15)	8.4 (4.8-13)	7.2 (4.0-11)	6.1 (3.4-9.9)	5.2 (2.9-8.6)	4.5 (2.4-7.4)
5	20 (12-25)	15 (9.8-20)	13 (8.4-17)	11 (7.2-14)	9.2 (6.1-12)	7.9 (5.3-11)	6.7 (4.5-9.1)
6	30	23	19	16	14	12	10.0

Age = 60 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	2.4	2.0	1.7	1.5	1.3	1.1	1.0
1	4.0 (2.9-5.7)	3.2 (2.3-4.5)	2.8 (1.9-3.7)	2.4 (1.6-3.2)	2.0 (1.4-2.7)	1.7 (1.2-2.3)	1.5 (1.0-2.0)
2	6.5 (4.0-10)	5.1 (3.0-7.8)	4.3 (2.5-6.8)	3.7 (2.1-5.9)	3.1 (1.8-5.1)	2.7 (1.5-4.4)	2.3 (1.3-3.8)
3	10 (6.3-16)	8.0 (4.6-13)	6.7 (3.6-11)	5.7 (3.0-9.7)	4.8 (2.5-8.3)	4.1 (2.2-7.2)	3.5 (1.8-6.2)
4	16 (9.6-23)	12 (7.5-18)	10 (6.3-16)	8.6 (5.2-13)	7.3 (4.4-12)	6.2 (3.7-9.9)	5.3 (3.1-8.6)
5	25 (16-30)	19 (13-24)	15 (11-20)	13 (9.0-17)	11 (7.6-14)	9.3 (6.5-12)	8.0 (5.5-11)
6	36	28	23	19	16	14	12

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

Age = 65 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	3.1	2.5	2.1	1.8	1.5	1.3	1.1
1	5.1 (3.9-6.9)	4.0 (2.9-5.3)	3.3 (2.4-4.3)	2.8 (2.0-3.7)	2.4 (1.7-3.1)	2.0 (1.4-2.7)	1.7 (1.2-2.3)
2	8.2 (5.4-12)	6.3 (4.0-9.2)	5.2 (3.1-7.8)	4.4 (2.6-6.7)	3.7 (2.2-5.8)	3.2 (1.8-5.0)	2.7 (1.5-4.3)
3	13 (8.2-19)	9.8 (6.1-15)	7.9 (4.6-13)	6.7 (3.8-11)	5.7 (3.2-9.4)	4.8 (2.7-8.1)	4.1 (2.2-6.9)
4	20 (13-27)	15 (9.6-21)	12 (7.8-18)	10 (6.6-15)	8.6 (5.6-13)	7.3 (4.6-11)	6.2 (3.8-9.6)
5	29 (21-35)	22 (16-28)	18 (13-23)	15 (11-19)	13 (9.3-17)	11 (7.8-14)	9.1 (6.6-12)
6	41	33	26	22	19	16	13

Age = 70 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	4.2	3.2	2.6	2.2	1.9	1.6	1.4
1	6.8 (5.2-8.3)	5.1 (3.9-6.3)	4.1 (3.0-5.1)	3.4 (2.5-4.3)	2.9 (2.1-3.7)	2.4 (1.8-3.1)	2.0 (1.5-2.6)
2	11 (7.3-15)	8.2 (5.3-11)	6.3 (4.0-8.7)	5.3 (3.3-7.3)	4.4 (2.8-6.2)	3.7 (2.3-5.2)	3.1 (1.9-4.4)
3	18 (12-26)	13 (8.4-19)	9.8 (6.1-15)	8.1 (5.0-12)	6.8 (4.2-10)	5.6 (3.4-8.7)	4.7 (2.9-7.3)
4	28 (20-38)	21 (15-29)	15 (11-22)	13 (8.9-18)	10 (7.3-15)	8.6 (6.0-13)	7.2 (4.9-11)
5	41 (36-50)	32 (27-38)	23 (19-29)	19 (16-24)	16 (13-20)	13 (11-17)	11 (8.7-14)
6	57	46	35	30	25	20	17

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

Age = 75 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	5.4	4.2	3.4	2.9	2.4	2.0	1.7
1	9.3 (6.7-14)	6.9 (5.0-9.5)	5.4 (4.0-6.7)	4.4 (3.3-5.4)	3.7 (2.7-4.4)	3.1 (2.3-3.7)	2.6 (1.9-3.2)
2	16 (9.4-24)	11 (6.9-17)	8.5 (5.3-12)	7.0 (4.4-9.7)	5.8 (3.6-7.9)	4.8 (3.0-6.5)	3.9 (2.5-5.3)
3	25 (15-37)	19 (11-28)	14 (8.1-21)	11 (6.6-17)	9.1 (5.5-14)	7.5 (4.5-11)	6.1 (3.7-9.3)
4	39 (24-53)	30 (19-42)	22 (14-31)	18 (11-26)	15 (9.3-21)	12 (7.6-17)	9.7 (6.2-14)
5	54 (38-64)	45 (31-54)	34 (24-42)	28 (20-35)	23 (16-29)	19 (13-24)	15 (11-19)
6	69	62	50	42	36	29	24

Age = 80 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	6.5	5.2	4.3	3.6	3.0	2.5	2.1
1	11 (7.7-17)	8.3 (6.1-12)	6.6 (4.9-8.6)	5.5 (4.1-6.9)	4.5 (3.3-5.6)	3.8 (2.8-4.6)	3.1 (2.3-3.7)
2	17 (11-26)	13 (8.4-20)	10 (6.6-15)	8.5 (5.4-12)	7.0 (4.4-9.7)	5.7 (3.6-7.8)	4.7 (3.0-6.3)
3	27 (17-39)	21 (13-31)	16 (10-23)	13 (8.3-19)	11 (6.7-15)	8.8 (5.5-12)	7.2 (4.5-10)
4	39 (25-51)	32 (20-43)	25 (16-34)	20 (13-28)	17 (11-23)	13 (9.0-19)	11 (7.4-16)
5	52 (36-62)	45 (31-54)	37 (26-44)	30 (21-37)	25 (18-31)	21 (14-26)	17 (12-21)
6	65	60	51	44	37	31	25

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

Age = 85 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	7.3	6.1	5.2	4.3	3.6	3.0	2.5
1	12 (8.3-19)	9.7 (7.0-14)	8.0 (5.9-11)	6.6 (4.8-8.6)	5.4 (3.9-7.0)	4.5 (3.2-5.6)	3.7 (2.7-4.5)
2	19 (12-29)	15 (9.7-23)	12 (7.9-18)	10 (6.4-14)	8.3 (5.2-11)	6.8 (4.3-9.2)	5.5 (3.5-7.4)
3	28 (17-40)	23 (15-34)	19 (12-27)	16 (9.9-22)	13 (8.0-18)	10 (6.5-15)	8.3 (5.3-12)
4	39 (25-51)	34 (22-46)	28 (19-39)	23 (16-32)	19 (13-27)	16 (10-22)	13 (8.2-18)
5	52 (36-61)	47 (32-56)	41 (29-49)	34 (24-42)	28 (19-35)	23 (16-29)	19 (13-24)
6	63	60	55	47	40	34	28

Age = 90 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	7.6	6.7	5.9	4.9	4.0	3.3	2.7
1	12 (8.5-20)	11 (7.4-16)	9.1 (6.5-13)	7.4 (5.3-10)	6.0 (4.3-8.0)	4.9 (3.5-6.4)	4.0 (2.9-5.2)
2	19 (12-30)	16 (10-25)	14 (8.8-20)	11 (7.1-16)	9.2 (5.8-13)	7.4 (4.7-10)	6.0 (3.8-8.3)
3	28 (17-41)	25 (15-35)	21 (13-30)	17 (11-24)	14 (8.6-20)	11 (6.9-16)	9.0 (5.5-13)
4	39 (24-51)	35 (22-46)	31 (20-41)	25 (16-35)	21 (13-29)	17 (11-24)	14 (8.5-19)
5	51 (35-60)	47 (32-56)	42 (30-51)	36 (25-44)	30 (20-37)	25 (16-31)	20 (13-26)
6	62	59	55	48	41	35	29