

South Africa (White) - 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 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 (White). 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	1.2	1.1	1.1	0.9	0.8	0.7	0.6
1	1.9 (1.3-2.9)	1.8 (1.2-2.6)	1.7 (1.1-2.4)	1.5 (1.0-2.1)	1.3 (0.9-1.8)	1.1 (0.7-1.5)	1.0 (0.7-1.3)
2	3.1 (1.7-5.2)	2.8 (1.5-4.8)	2.6 (1.4-4.6)	2.3 (1.2-4.0)	2.0 (1.0-3.5)	1.7 (0.9-3.1)	1.5 (0.8-2.7)
3	5.0 (2.5-8.6)	4.4 (2.1-7.8)	4.0 (1.9-7.4)	3.5 (1.7-6.4)	3.0 (1.4-5.6)	2.6 (1.2-4.9)	2.3 (1.1-4.3)
4	7.8 (4.2-12)	6.7 (3.6-11)	6.1 (3.2-10)	5.3 (2.7-8.8)	4.5 (2.3-7.6)	3.9 (2.0-6.6)	3.4 (1.7-5.8)
5	12 (7.1-16)	10 (6.4-14)	9.1 (6.0-12)	7.8 (5.1-11)	6.7 (4.5-9.2)	5.8 (3.9-8.0)	5.0 (3.4-7.0)
6	18	15	13	11	9.9	8.5	7.4

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

Age = 55 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	1.6	1.5	1.4	1.2	1.1	0.9	0.8
1	2.7 (1.8-3.9)	2.4 (1.6-3.4)	2.2 (1.5-3.1)	1.9 (1.3-2.6)	1.7 (1.1-2.3)	1.5 (1.0-2.0)	1.3 (0.8-1.7)
2	4.3 (2.4-6.8)	3.7 (2.1-6.2)	3.5 (1.9-5.9)	3.0 (1.6-5.1)	2.6 (1.4-4.4)	2.2 (1.2-3.9)	1.9 (1.0-3.4)
3	6.8 (3.7-11)	5.8 (3.0-10.0)	5.3 (2.6-9.4)	4.5 (2.2-8.1)	3.9 (1.9-7.1)	3.4 (1.6-6.1)	2.9 (1.4-5.3)
4	11 (6.0-16)	8.9 (5.1-14)	7.9 (4.4-13)	6.8 (3.7-11)	5.9 (3.2-9.6)	5.0 (2.7-8.3)	4.3 (2.3-7.2)
5	16 (9.9-21)	13 (8.6-18)	12 (7.9-16)	10 (6.8-14)	8.7 (5.9-12)	7.4 (5.0-10)	6.4 (4.3-8.8)
6	24	20	17	15	13	11	9.3

Age = 60 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	2.3	2.1	1.9	1.7	1.5	1.3	1.1
1	3.8 (2.7-5.4)	3.3 (2.3-4.5)	3.0 (2.1-4.1)	2.6 (1.8-3.5)	2.2 (1.5-3.0)	1.9 (1.3-2.6)	1.7 (1.1-2.2)
2	5.9 (3.6-9.0)	5.1 (3.0-8.1)	4.7 (2.6-7.6)	4.0 (2.2-6.6)	3.4 (1.9-5.7)	2.9 (1.6-5.0)	2.5 (1.4-4.3)
3	9.3 (5.5-14)	7.9 (4.4-13)	7.1 (3.7-12)	6.0 (3.2-10)	5.2 (2.7-9.0)	4.4 (2.3-7.8)	3.8 (1.9-6.8)
4	14 (8.7-21)	12 (7.4-18)	11 (6.2-17)	9.0 (5.2-14)	7.7 (4.4-12)	6.6 (3.7-11)	5.6 (3.1-9.2)
5	21 (14-27)	18 (12-23)	15 (11-20)	13 (9.2-18)	11 (7.9-15)	9.7 (6.7-13)	8.3 (5.8-11)
6	30	26	22	19	16	14	12

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

Age = 65 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	3.2	2.8	2.5	2.2	1.9	1.6	1.4
1	5.0 (3.7-6.9)	4.3 (3.1-5.8)	3.9 (2.7-5.1)	3.3 (2.3-4.4)	2.8 (2.0-3.7)	2.4 (1.7-3.2)	2.1 (1.4-2.7)
2	7.8 (5.0-11)	6.7 (4.1-10.0)	6.0 (3.5-9.3)	5.1 (2.9-8.1)	4.3 (2.5-7.0)	3.7 (2.1-6.0)	3.2 (1.8-5.2)
3	12 (7.9-17)	10 (6.2-16)	8.9 (5.1-15)	7.6 (4.3-13)	6.5 (3.6-11)	5.5 (3.0-9.4)	4.7 (2.5-8.1)
4	18 (12-25)	15 (10-22)	13 (8.5-20)	11 (7.1-17)	9.6 (5.9-15)	8.1 (4.9-13)	6.9 (4.1-11)
5	26 (18-32)	22 (16-28)	19 (14-25)	16 (12-21)	14 (10-18)	12 (8.5-16)	10 (7.3-14)
6	36	31	27	23	20	17	14

Age = 70 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	4.4	3.7	3.3	2.8	2.4	2.0	1.7
1	6.9 (5.0-8.6)	5.7 (4.2-7.2)	5.0 (3.6-6.4)	4.2 (3.0-5.4)	3.5 (2.6-4.6)	3.0 (2.2-3.9)	2.5 (1.8-3.3)
2	11 (7.0-15)	8.8 (5.6-12)	7.5 (4.7-10)	6.2 (3.9-8.8)	5.2 (3.3-7.4)	4.4 (2.7-6.3)	3.7 (2.3-5.3)
3	17 (11-24)	14 (8.7-20)	11 (7.0-17)	9.3 (5.8-14)	7.8 (4.8-12)	6.5 (4.0-10.0)	5.5 (3.3-8.4)
4	25 (17-34)	20 (14-29)	17 (12-24)	14 (9.5-20)	12 (7.8-17)	9.7 (6.5-14)	8.0 (5.3-12)
5	36 (30-44)	30 (25-38)	25 (20-31)	21 (17-26)	17 (14-22)	14 (11-19)	12 (9.2-16)
6	48	43	36	30	25	21	17

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

Age = 75 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	6.1	5.1	4.5	3.7	3.1	2.6	2.2
1	10 (7.1-15)	8.2 (5.9-11)	6.8 (5.0-8.5)	5.7 (4.1-6.9)	4.7 (3.4-5.7)	3.9 (2.8-4.8)	3.3 (2.4-4.1)
2	16 (9.9-25)	13 (8.1-20)	11 (6.6-15)	8.7 (5.4-12)	7.2 (4.5-10)	5.9 (3.7-8.2)	4.9 (3.1-6.8)
3	25 (15-38)	21 (13-30)	17 (10-24)	14 (8.2-20)	11 (6.7-16)	9.1 (5.5-13)	7.4 (4.5-11)
4	37 (23-49)	31 (19-44)	25 (16-36)	21 (13-30)	17 (11-25)	14 (8.8-20)	11 (7.1-17)
5	49 (35-59)	45 (31-54)	38 (27-46)	31 (22-39)	26 (19-33)	21 (15-27)	17 (13-22)
6	62	58	52	45	38	32	26

Age = 80 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	8.4	7.0	5.9	4.9	4.0	3.3	2.8
1	14 (9.6-21)	11 (8.1-17)	9.2 (6.7-13)	7.5 (5.5-10)	6.1 (4.5-8.1)	5.0 (3.6-6.5)	4.1 (3.0-5.3)
2	21 (14-33)	18 (11-26)	14 (9.1-20)	12 (7.4-17)	9.5 (6.0-13)	7.7 (4.9-11)	6.3 (4.0-8.6)
3	31 (19-44)	27 (17-38)	22 (14-31)	18 (11-26)	15 (9.2-21)	12 (7.5-17)	9.5 (6.0-13)
4	42 (27-54)	38 (25-50)	32 (22-43)	27 (18-37)	22 (14-30)	18 (12-25)	14 (9.3-21)
5	54 (39-62)	50 (36-59)	45 (32-54)	38 (27-47)	32 (22-40)	26 (18-33)	22 (15-27)
6	65	62	58	51	44	37	31

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

Age = 85 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	11	9.4	7.8	6.3	5.1	4.2	3.4
1	18 (13-29)	15 (11-24)	12 (9.0-18)	10 (7.2-15)	8.1 (5.8-12)	6.5 (4.6-9.3)	5.3 (3.7-7.4)
2	27 (17-41)	23 (15-36)	19 (12-28)	16 (10.0-23)	13 (8.0-19)	10 (6.4-15)	8.2 (5.1-12)
3	37 (24-52)	34 (22-47)	29 (19-41)	24 (15-34)	20 (12-28)	16 (9.7-23)	13 (7.7-18)
4	49 (33-61)	46 (30-58)	41 (28-53)	35 (23-46)	29 (18-39)	24 (15-33)	19 (12-27)
5	60 (45-68)	57 (42-66)	54 (39-63)	47 (33-56)	40 (27-49)	34 (23-42)	28 (18-35)
6	69	68	66	59	53	46	39

Age = 90 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	15	12	9.9	7.9	6.3	5.0	4.0
1	23 (17-36)	20 (14-31)	16 (12-25)	13 (9.3-20)	10 (7.3-16)	8.2 (5.8-13)	6.5 (4.6-10)
2	33 (22-49)	30 (20-45)	25 (16-38)	21 (13-31)	17 (10-25)	13 (8.2-20)	10 (6.4-16)
3	44 (30-59)	41 (27-56)	37 (24-50)	31 (19-43)	25 (15-36)	20 (12-30)	16 (9.6-24)
4	55 (39-67)	53 (37-65)	49 (34-61)	42 (28-54)	36 (23-47)	30 (18-40)	25 (15-34)
5	65 (52-72)	64 (49-71)	61 (46-69)	55 (40-64)	48 (33-57)	41 (27-50)	35 (22-43)
6	72	72	71	66	60	53	46