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 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/m²						
	15	20	25	30	35	40	45
0	1.7	1.5	1.4	1.2	1.0	0.9	0.8
1	2.8 (1.9-4.2)	2.4 (1.6-3.4)	2.2 (1.5-3.0)	1.9 (1.3-2.6)	1.6 (1.1-2.3)	1.4 (1.0-2.0)	1.2 (0.8-1.7)
2	4.5 (2.5-7.5)	3.8 (2.0-6.3)	3.4 (1.8-5.8)	2.9 (1.6-5.1)	2.6 (1.3-4.4)	2.2 (1.2-3.9)	1.9 (1.0-3.4)
3	7.4 (3.7-12)	6.0 (2.9-11)	5.3 (2.5-9.6)	4.5 (2.2-8.3)	3.9 (1.9-7.3)	3.4 (1.6-6.3)	3.0 (1.4-5.5)
4	12 (6.2-18)	9.4 (5.2-15)	8.0 (4.3-13)	6.9 (3.7-11)	6.0 (3.2-9.9)	5.2 (2.7-8.6)	4.5 (2.3-7.5)
5	18 (11-23)	14 (9.0-19)	12 (7.9-16)	10 (6.8-14)	9.0 (5.9-12)	7.8 (5.1-10)	6.7 (4.5-9.1)
6	28	22	18	15	13	11	9.9

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

Age = 55 years

Number of CRFs	BMI kg/m²						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	2.5	2.2	2.0	1.7	1.5	1.3	1.1
1	4.2 (3.0-6.1)	3.5 (2.4-4.9)	3.1 (2.2-4.3)	2.7 (1.9-3.7)	2.4 (1.6-3.2)	2.0 (1.4-2.8)	1.8 (1.2-2.4)
2	6.8 (3.9-11)	5.6 (3.1-8.9)	4.9 (2.7-8.1)	4.2 (2.3-7.0)	3.6 (2.0-6.1)	3.2 (1.7-5.4)	2.7 (1.5-4.7)
3	11 (6.0-18)	8.7 (4.5-15)	7.5 (3.8-13)	6.5 (3.2-12)	5.6 (2.8-10)	4.8 (2.4-8.7)	4.2 (2.0-7.6)
4	17 (9.7-25)	13 (7.9-21)	11 (6.5-18)	9.8 (5.5-16)	8.5 (4.7-14)	7.3 (4.0-12)	6.3 (3.4-10)
5	26 (17-33)	20 (13-26)	17 (12-22)	15 (10.0-19)	13 (8.6-17)	11 (7.4-14)	9.4 (6.4-13)
6	39	30	25	21	19	16	14

Age = 60 years

Number of CRFs	BMI kg/m²						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	4.0	3.3	3.0	2.6	2.2	1.9	1.7
1	6.5 (4.8-9.1)	5.3 (3.8-7.2)	4.6 (3.3-6.2)	4.0 (2.8-5.3)	3.5 (2.4-4.6)	3.0 (2.1-4.0)	2.6 (1.8-3.4)
2	10 (6.4-16)	8.3 (4.9-13)	7.2 (4.1-11)	6.2 (3.5-10.0)	5.3 (3.0-8.7)	4.6 (2.6-7.6)	4.0 (2.2-6.6)
3	16 (9.9-25)	13 (7.3-21)	11 (5.8-19)	9.4 (5.0-16)	8.1 (4.2-14)	7.0 (3.6-12)	6.1 (3.1-11)
4	25 (15-35)	20 (12-29)	16 (10-25)	14 (8.6-22)	12 (7.3-19)	10 (6.2-17)	9.1 (5.2-15)
5	37 (26-45)	29 (21-36)	24 (17-31)	21 (15-27)	18 (13-23)	15 (11-20)	13 (9.5-18)
6	53	42	34	30	26	22	19

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

Age = 65 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	6.0	4.8	4.2	3.6	3.1	2.7	2.3
1	9.5 (7.3-13)	7.6 (5.6-9.9)	6.5 (4.7-8.4)	5.6 (4.0-7.2)	4.8 (3.4-6.2)	4.2 (2.9-5.4)	3.6 (2.5-4.6)
2	15 (9.8-22)	12 (7.3-17)	10.0 (5.9-15)	8.6 (5.0-13)	7.4 (4.3-12)	6.4 (3.7-10)	5.5 (3.1-8.8)
3	23 (15-33)	18 (11-27)	15 (8.6-24)	13 (7.3-21)	11 (6.1-19)	9.6 (5.2-16)	8.3 (4.4-14)
4	34 (23-45)	27 (18-38)	22 (15-33)	19 (13-29)	16 (11-25)	14 (9.0-22)	12 (7.6-19)
5	48 (37-56)	38 (29-46)	32 (24-40)	28 (21-35)	24 (18-30)	21 (15-27)	18 (13-23)
6	64	53	44	39	34	29	25

Age = 70 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	9.0	7.1	6.0	5.2	4.4	3.8	3.3
1	14 (11-17)	11 (8.4-14)	9.0 (6.8-11)	7.7 (5.8-9.8)	6.6 (4.9-8.4)	5.7 (4.2-7.3)	4.9 (3.6-6.3)
2	22 (15-30)	17 (11-23)	14 (8.7-19)	12 (7.4-16)	9.8 (6.2-14)	8.4 (5.3-12)	7.2 (4.5-10)
3	34 (23-47)	26 (17-37)	20 (13-30)	17 (11-26)	15 (9.0-22)	12 (7.6-19)	11 (6.5-16)
4	50 (39-64)	38 (29-51)	30 (22-41)	25 (18-36)	22 (15-31)	18 (13-27)	16 (11-23)
5	67 (61-75)	54 (48-63)	43 (36-51)	37 (31-45)	32 (26-39)	27 (22-33)	23 (18-29)
6	81	72	59	52	45	39	33

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

Age = 75 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	14	11	8.7	7.4	6.4	5.4	4.7
1	22 (17-31)	17 (13-22)	13 (10-15)	11 (8.4-13)	9.4 (7.1-11)	8.0 (6.0-9.8)	6.8 (5.1-8.4)
2	35 (23-49)	26 (17-37)	20 (13-27)	17 (11-22)	14 (9.2-19)	12 (7.7-16)	10 (6.5-14)
3	52 (35-68)	40 (25-56)	30 (19-43)	26 (16-37)	22 (13-31)	18 (11-26)	15 (9.5-22)
4	69 (53-81)	57 (41-72)	45 (32-59)	38 (27-52)	32 (23-45)	27 (19-38)	23 (16-32)
5	81 (70-87)	74 (61-82)	62 (50-71)	55 (43-64)	47 (37-56)	40 (32-48)	34 (27-42)
6	88	86	79	72	65	57	50

Age = 80 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	20	15	12	10	8.6	7.3	6.2
1	31 (24-44)	23 (18-32)	18 (14-23)	15 (12-19)	13 (9.8-16)	11 (8.2-13)	9.2 (6.9-11)
2	45 (32-62)	36 (24-50)	27 (18-38)	23 (15-32)	19 (13-27)	16 (11-22)	14 (9.0-18)
3	61 (45-75)	51 (36-67)	40 (27-54)	34 (23-46)	29 (19-40)	24 (16-34)	20 (13-28)
4	74 (61-83)	67 (50-79)	56 (41-70)	49 (35-62)	42 (30-55)	36 (25-47)	30 (21-41)
5	82 (73-87)	80 (68-85)	72 (59-80)	65 (52-73)	58 (45-66)	50 (39-59)	43 (33-51)
6	87	87	84	80	74	67	59

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

Age = 85 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	27	21	16	13	11	9.4	7.9
1	40 (32-56)	32 (25-44)	25 (19-33)	21 (16-27)	17 (13-23)	14 (11-19)	12 (9.0-15)
2	55 (42-71)	46 (33-62)	37 (25-51)	31 (21-44)	26 (17-37)	22 (14-31)	18 (12-25)
3	68 (54-79)	61 (46-75)	52 (37-67)	45 (31-60)	38 (26-52)	33 (22-45)	27 (18-38)
4	77 (65-85)	74 (61-83)	68 (52-79)	61 (45-73)	53 (39-67)	46 (33-59)	40 (28-52)
5	83 (75-87)	82 (73-87)	80 (69-86)	75 (62-82)	68 (55-76)	62 (48-70)	54 (41-63)
6	86	87	87	84	80	75	69

Age = 90 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	33	26	20	16	13	11	9.1
1	47 (38-63)	39 (31-55)	31 (24-43)	26 (20-36)	21 (16-30)	18 (13-25)	14 (11-20)
2	60 (48-75)	54 (41-70)	45 (32-61)	39 (27-53)	32 (22-46)	27 (18-39)	22 (15-32)
3	70 (58-81)	67 (54-79)	61 (45-75)	54 (39-69)	46 (32-62)	40 (27-54)	33 (22-46)
4	78 (68-85)	77 (65-84)	74 (61-83)	68 (53-78)	61 (46-73)	54 (39-67)	47 (33-60)
5	82 (76-85)	83 (75-86)	82 (73-87)	78 (67-84)	74 (61-80)	68 (54-76)	61 (47-70)
6	83	86	87	85	82	78	73