

South Africa (White) - The probabilities of a hip fracture in women

The following tables give the 10-year probability (%) of a hip 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/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	7.2	3.8	1.9	1.0	0.5	0.3	0.1	0.1	0.0	0.0	0.0
1	11 (7.6-15)	6.0 (3.9-7.9)	3.1 (2.0-4.1)	1.6 (1.0-2.1)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	18 (11-26)	9.5 (5.6-14)	5.0 (2.9-7.5)	2.6 (1.5-3.9)	1.3 (0.8-2.0)	0.7 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
3	27 (16-41)	15 (8.4-23)	7.8 (4.4-13)	4.1 (2.2-6.7)	2.1 (1.2-3.5)	1.1 (0.6-1.8)	0.5 (0.3-0.9)	0.3 (0.2-0.5)	0.1 (0.1-0.3)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
4	38 (26-55)	22 (14-33)	12 (7.4-19)	6.3 (3.9-10)	3.3 (2.0-5.2)	1.7 (1.0-2.7)	0.9 (0.5-1.4)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
5	53 (43-67)	32 (25-44)	18 (14-26)	9.7 (7.1-14)	5.1 (3.7-7.4)	2.6 (1.9-3.8)	1.3 (1.0-2.0)	0.7 (0.5-1.0)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
6	69	45	27	15	7.7	4.0	2.1	1.1	0.6	0.3	0.2

Ten years probability of hip 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	7.9	4.3	2.4	1.3	0.7	0.4	0.2	0.1	0.1	0.0	0.0
1	12 (8.3-15)	6.8 (4.6-8.4)	3.7 (2.5-4.6)	2.0 (1.3-2.5)	1.1 (0.7-1.3)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	19 (12-26)	11 (6.4-15)	5.8 (3.5-8.4)	3.2 (1.9-4.6)	1.7 (1.0-2.5)	0.9 (0.5-1.4)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	28 (17-41)	16 (9.6-25)	9.0 (5.3-14)	4.9 (2.9-7.8)	2.7 (1.6-4.3)	1.4 (0.8-2.3)	0.8 (0.5-1.3)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	39 (28-55)	24 (16-35)	14 (9.0-21)	7.6 (4.9-12)	4.1 (2.7-6.5)	2.2 (1.4-3.5)	1.2 (0.8-1.9)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	53 (45-67)	34 (28-46)	20 (16-28)	11 (9.0-16)	6.3 (4.9-9.1)	3.4 (2.7-5.0)	1.9 (1.4-2.7)	1.0 (0.8-1.5)	0.6 (0.5-0.8)	0.3 (0.3-0.5)	0.2 (0.1-0.3)
6	69	47	29	17	9.5	5.2	2.8	1.6	0.9	0.5	0.3

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	9.0	5.1	2.9	1.6	0.9	0.5	0.3	0.2	0.1	0.1	0.0
1	14 (9.4-16)	7.9 (5.4-9.3)	4.5 (3.0-5.3)	2.5 (1.7-3.0)	1.4 (0.9-1.7)	0.8 (0.5-0.9)	0.4 (0.3-0.5)	0.3 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
2	20 (13-27)	12 (7.5-16)	6.9 (4.3-9.4)	3.9 (2.4-5.4)	2.2 (1.3-3.0)	1.2 (0.8-1.7)	0.7 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
3	29 (19-42)	18 (11-26)	10 (6.4-16)	5.9 (3.6-9.1)	3.4 (2.0-5.2)	1.9 (1.1-2.9)	1.1 (0.6-1.7)	0.6 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	41 (31-56)	26 (19-37)	15 (11-23)	9.0 (6.2-13)	5.1 (3.5-7.8)	2.9 (2.0-4.4)	1.6 (1.1-2.5)	0.9 (0.6-1.5)	0.5 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
5	55 (49-68)	36 (31-48)	23 (19-31)	13 (11-19)	7.7 (6.3-11)	4.4 (3.5-6.2)	2.5 (2.0-3.6)	1.4 (1.2-2.1)	0.8 (0.7-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)
6	70	50	32	19	11	6.5	3.7	2.2	1.3	0.7	0.4

Ten years probability of hip 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	9.8	5.8	3.4	2.0	1.1	0.7	0.4	0.2	0.1	0.1	0.1
1	15 (10-17)	8.8 (6.1-10)	5.2 (3.6-6.2)	3.0 (2.1-3.6)	1.8 (1.2-2.1)	1.0 (0.7-1.2)	0.6 (0.4-0.7)	0.4 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
2	21 (14-28)	13 (8.5-17)	7.8 (5.0-10)	4.6 (2.9-6.2)	2.7 (1.7-3.6)	1.6 (1.0-2.1)	0.9 (0.6-1.3)	0.6 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	30 (21-42)	19 (13-27)	12 (7.6-17)	6.9 (4.4-10)	4.1 (2.6-6.0)	2.4 (1.5-3.5)	1.4 (0.9-2.1)	0.9 (0.5-1.3)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	42 (32-55)	27 (20-38)	17 (12-24)	10 (7.3-15)	6.1 (4.3-9.0)	3.6 (2.5-5.3)	2.2 (1.5-3.2)	1.3 (0.9-1.9)	0.8 (0.6-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
5	55 (49-68)	38 (32-49)	24 (20-33)	15 (12-21)	9.0 (7.3-13)	5.3 (4.3-7.5)	3.2 (2.6-4.5)	1.9 (1.6-2.8)	1.2 (0.9-1.7)	0.7 (0.6-1.0)	0.4 (0.3-0.6)
6	69	51	34	22	13	7.8	4.8	2.9	1.8	1.1	0.6

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	11	6.8	4.1	2.5	1.5	0.9	0.6	0.4	0.2	0.1	0.1
1	18 (15-22)	11 (9.5-14)	6.9 (5.8-8.7)	4.2 (3.6-5.3)	2.6 (2.2-3.2)	1.6 (1.3-2.0)	1.0 (0.8-1.3)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.2 (0.1-0.2)
2	28 (22-37)	18 (14-24)	11 (8.8-15)	7.1 (5.4-9.6)	4.3 (3.3-5.9)	2.7 (2.0-3.7)	1.7 (1.3-2.3)	1.1 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
3	42 (32-53)	28 (21-37)	18 (13-25)	12 (8.2-16)	7.2 (5.0-9.8)	4.5 (3.1-6.2)	2.8 (2.0-3.9)	1.8 (1.2-2.5)	1.1 (0.8-1.6)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
4	59 (48-67)	42 (33-51)	29 (21-35)	19 (14-23)	12 (8.4-15)	7.4 (5.3-9.4)	4.7 (3.3-6.0)	3.0 (2.1-3.8)	1.9 (1.3-2.4)	1.2 (0.8-1.5)	0.7 (0.5-0.9)
5	75 (68-80)	59 (51-65)	43 (36-48)	29 (23-33)	19 (15-22)	12 (9.5-14)	7.7 (6.1-9.0)	4.9 (3.8-5.7)	3.1 (2.4-3.6)	2.0 (1.5-2.3)	1.2 (1.0-1.4)
6	87	76	60	43	29	19	13	8.1	5.1	3.2	2.0

Ten years probability of hip 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	13	8.3	5.3	3.4	2.1	1.4	0.9	0.6	0.4	0.3	0.2
1	24 (18-45)	16 (12-31)	10 (7.5-21)	6.7 (4.8-14)	4.3 (3.0-9.0)	2.8 (2.0-6.0)	1.9 (1.3-3.9)	1.2 (0.8-2.6)	0.8 (0.6-1.7)	0.5 (0.4-1.1)	0.3 (0.2-0.7)
2	39 (24-64)	28 (16-49)	19 (10-35)	12 (6.7-24)	8.1 (4.3-16)	5.4 (2.8-11)	3.6 (1.8-7.1)	2.3 (1.2-4.7)	1.5 (0.8-3.1)	1.0 (0.5-2.0)	0.7 (0.3-1.3)
3	57 (34-78)	44 (23-65)	31 (16-50)	22 (10-36)	14 (6.5-25)	9.7 (4.3-17)	6.5 (2.8-12)	4.3 (1.8-7.8)	2.9 (1.2-5.2)	1.9 (0.8-3.4)	1.2 (0.5-2.3)
4	74 (50-86)	62 (36-77)	48 (25-64)	35 (16-49)	24 (11-35)	17 (7.1-25)	12 (4.7-17)	7.7 (3.1-12)	5.1 (2.0-7.8)	3.4 (1.3-5.2)	2.2 (0.9-3.4)
5	86 (69-90)	79 (54-85)	67 (40-75)	53 (28-61)	39 (19-46)	28 (13-33)	20 (8.4-24)	13 (5.6-16)	9.0 (3.7-11)	6.0 (2.5-7.4)	4.0 (1.6-4.9)
6	92	89	83	72	57	44	32	22	15	10	6.9

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	10	6.8	4.5	3.1	2.1	1.4	1.0	0.7	0.5	0.3
1	27 (19-49)	19 (13-37)	13 (8.9-26)	8.8 (5.9-18)	6.0 (4.0-13)	4.2 (2.8-8.9)	2.9 (1.9-6.2)	2.0 (1.3-4.3)	1.4 (0.9-2.9)	0.9 (0.6-2.0)	0.6 (0.4-1.4)
2	42 (26-68)	31 (18-55)	23 (12-42)	16 (8.3-30)	11 (5.7-22)	7.8 (3.9-15)	5.4 (2.7-11)	3.8 (1.9-7.6)	2.6 (1.3-5.3)	1.8 (0.9-3.7)	1.2 (0.6-2.5)
3	59 (37-79)	47 (26-69)	36 (18-56)	27 (12-44)	19 (8.5-33)	14 (5.9-24)	9.7 (4.1-17)	6.8 (2.8-12)	4.7 (1.9-8.7)	3.3 (1.3-6.1)	2.2 (0.9-4.2)
4	74 (51-86)	64 (39-79)	53 (28-69)	41 (20-57)	31 (14-45)	23 (9.7-34)	16 (6.7-25)	12 (4.7-18)	8.2 (3.2-13)	5.7 (2.2-9.1)	4.0 (1.5-6.3)
5	85 (68-89)	79 (56-85)	70 (43-78)	58 (32-68)	46 (23-56)	36 (17-44)	27 (12-33)	19 (8.3-25)	14 (5.8-18)	9.8 (4.0-13)	6.9 (2.8-8.9)
6	90	88	83	75	64	53	41	31	23	16	12

Ten years probability of hip 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	18	13	9.1	6.4	4.6	3.3	2.4	1.7	1.3	0.9	0.7
1	30 (23-55)	23 (16-44)	17 (12-33)	12 (8.3-25)	8.9 (6.0-18)	6.5 (4.4-14)	4.8 (3.2-10)	3.5 (2.3-7.4)	2.5 (1.7-5.4)	1.8 (1.2-3.9)	1.3 (0.9-2.8)
2	46 (30-70)	37 (22-60)	28 (16-49)	21 (12-39)	16 (8.4-30)	12 (6.2-23)	8.7 (4.5-17)	6.4 (3.2-13)	4.7 (2.3-9.4)	3.4 (1.7-6.9)	2.5 (1.2-5.0)
3	62 (42-80)	52 (32-72)	43 (24-62)	34 (17-52)	26 (13-42)	20 (9.2-33)	15 (6.7-26)	11 (4.9-20)	8.3 (3.5-15)	6.1 (2.6-11)	4.5 (1.8-8.1)
4	75 (56-85)	68 (45-80)	59 (35-73)	49 (26-64)	40 (20-55)	32 (15-45)	25 (11-36)	19 (7.9-28)	14 (5.8-22)	11 (4.2-16)	7.8 (3.1-12)
5	84 (69-87)	79 (60-84)	73 (50-80)	65 (39-73)	56 (31-65)	47 (24-56)	38 (18-46)	30 (14-37)	23 (10-29)	18 (7.4-22)	13 (5.4-17)
6	88	86	83	79	72	64	55	45	36	28	21

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	20	15	12	8.7	6.7	5.2	3.9	3.0	2.3	1.7	1.3
1	33 (26-58)	27 (20-49)	21 (15-40)	16 (11-32)	13 (8.8-26)	9.8 (6.7-20)	7.6 (5.2-16)	5.9 (3.9-12)	4.5 (3.0-9.6)	3.4 (2.3-7.4)	2.6 (1.7-5.6)
2	49 (34-71)	41 (27-64)	33 (20-55)	27 (16-47)	22 (12-39)	17 (9.4-32)	14 (7.2-26)	11 (5.6-21)	8.2 (4.2-16)	6.3 (3.2-13)	4.9 (2.5-9.7)
3	63 (45-79)	56 (37-74)	48 (29-67)	40 (23-59)	34 (18-51)	28 (14-43)	23 (11-36)	18 (8.3-30)	14 (6.4-24)	11 (4.9-19)	8.6 (3.7-15)
4	74 (58-83)	69 (49-80)	63 (40-75)	56 (33-69)	49 (26-62)	42 (21-55)	35 (17-48)	29 (13-41)	23 (10-34)	18 (7.8-27)	15 (6.0-22)
5	82 (68-86)	79 (62-84)	75 (54-80)	70 (46-76)	64 (39-71)	57 (32-65)	50 (26-58)	43 (21-51)	36 (17-43)	29 (13-36)	23 (10-29)
6	87	85	83	80	76	72	66	59	51	43	36