Morocco - 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 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 Morocco. 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	7.9	4.8	3.0	2.1	1.5	1.2	1.0	0.8	0.7	0.7	0.7
1	12 (9.8-16)	7.4 (6.4-9.6)	4.7 (4.1-6.1)	3.2 (2.7-4.1)	2.3 (1.8-2.9)	1.8 (1.3-2.3)	1.5 (1.0-1.9)	1.2 (0.8-1.7)	1.1 (0.7-1.5)	1.0 (0.7-1.5)	1.0 (0.6-1.4)
2	19 (13-26)	11 (8.6-16)	7.2 (5.6-10)	4.9 (3.6-6.9)	3.5 (2.4-5.1)	2.7 (1.7-4.2)	2.2 (1.3-3.6)	1.8 (1.0-3.1)	1.6 (0.9-2.8)	1.5 (0.8-2.7)	1.5 (0.8-2.6)
3	27 (18-38)	17 (12-24)	11 (7.6-14)	7.3 (5.0-11)	5.2 (3.3-8.3)	4.0 (2.3-6.8)	3.2 (1.7-5.7)	2.7 (1.3-5.0)	2.4 (1.1-4.5)	2.3 (1.0-4.3)	2.1 (1.0-4.2)
4	38 (26-50)	25 (16-33)	16 (10-20)	11 (6.9-14)	7.6 (4.9-11)	5.8 (3.8-8.8)	4.6 (2.8-7.4)	3.9 (2.2-6.4)	3.4 (1.8-5.8)	3.2 (1.7-5.6)	3.1 (1.6-5.4)
5	51 (41-62)	35 (27-42)	23 (17-27)	16 (12-18)	11 (8.2-13)	8.3 (6.2-11)	6.6 (4.9-8.9)	5.5 (4.1-7.7)	4.8 (3.5-6.9)	4.5 (3.2-6.6)	4.3 (2.9-6.3)
6	65	47	32	22	16	12	9.2	7.6	6.7	6.3	6.0

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Morocco.

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	9.0	5.7	3.8	2.6	1.9	1.5	1.2	1.0	0.9	0.9	0.8
1	14 (11-17)	8.6 (7.8-11)	5.7 (5.0-7.0)	4.0 (3.3-4.9)	2.9 (2.3-3.6)	2.3 (1.7-2.8)	1.8 (1.3-2.4)	1.5 (1.0-2.1)	1.4 (0.9-1.9)	1.3 (0.8-1.8)	1.2 (0.8-1.7)
2	20 (15-27)	13 (10-18)	8.6 (6.8-12)	6.0 (4.5-8.1)	4.4 (3.0-6.3)	3.4 (2.2-5.1)	2.7 (1.6-4.4)	2.3 (1.3-3.8)	2.0 (1.1-3.5)	1.9 (1.0-3.3)	1.8 (0.9-3.1)
3	28 (21-37)	19 (14-24)	13 (9.2-17)	8.7 (6.2-13)	6.4 (4.1-10)	4.9 (2.9-8.2)	3.9 (2.1-6.9)	3.3 (1.7-6.0)	2.9 (1.4-5.5)	2.7 (1.3-5.2)	2.6 (1.2-4.9)
4	39 (28-49)	27 (19-33)	18 (12-22)	13 (8.6-16)	9.2 (6.2-13)	7.0 (4.8-11)	5.6 (3.5-8.9)	4.7 (2.7-7.7)	4.2 (2.3-7.0)	3.9 (2.1-6.7)	3.7 (1.9-6.3)
5	51 (43-60)	36 (29-43)	25 (20-29)	18 (14-21)	13 (10-16)	9.9 (7.6-13)	7.9 (6.1-11)	6.5 (5.0-9.1)	5.8 (4.2-8.3)	5.4 (3.8-7.8)	5.1 (3.5-7.4)
6	64	48	34	25	18	14	11	9.0	8.0	7.4	7.0

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	9.4	6.3	4.4	3.2	2.4	1.9	1.5	1.3	1.2	1.1	1.0
1	14 (12-16)	9.4 (8.5-11)	6.5 (5.6-7.8)	4.7 (3.9-5.6)	3.6 (2.8-4.2)	2.8 (2.1-3.5)	2.2 (1.6-2.9)	1.9 (1.3-2.5)	1.7 (1.1-2.3)	1.6 (1.0-2.2)	1.4 (0.9-2.1)
2	20 (16-26)	14 (11-18)	9.5 (7.7-13)	6.9 (5.3-9.1)	5.2 (3.7-7.3)	4.1 (2.7-6.1)	3.3 (2.0-5.1)	2.7 (1.6-4.4)	2.5 (1.4-4.1)	2.3 (1.2-3.8)	2.1 (1.1-3.6)
3	27 (21-34)	19 (15-24)	14 (10-18)	9.9 (7.2-14)	7.5 (5.0-11)	5.8 (3.6-9.5)	4.7 (2.7-8.0)	3.9 (2.1-6.9)	3.5 (1.8-6.4)	3.2 (1.6-6.0)	3.0 (1.4-5.6)
4	37 (28-43)	27 (20-31)	19 (14-23)	14 (10-18)	11 (7.5-15)	8.2 (5.8-12)	6.6 (4.3-10)	5.5 (3.3-8.8)	4.9 (2.8-8.2)	4.5 (2.5-7.6)	4.2 (2.3-7.2)
5	47 (41-53)	35 (30-40)	26 (21-30)	19 (16-23)	15 (12-18)	11 (9.0-15)	9.1 (7.2-12)	7.5 (5.8-11)	6.8 (5.0-9.7)	6.2 (4.4-9.0)	5.8 (4.0-8.5)
6	58	45	34	26	20	15	12	10	9.2	8.4	7.8

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Morocco.

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	9.2	6.5	4.7	3.5	2.7	2.1	1.7	1.4	1.3	1.1	1.0
1	13 (12-15)	9.4 (8.3-11)	6.8 (5.8-7.8)	5.1 (4.1-5.8)	3.9 (3.0-4.5)	3.0 (2.3-3.7)	2.4 (1.7-3.1)	2.0 (1.4-2.7)	1.8 (1.2-2.5)	1.6 (1.1-2.3)	1.5 (1.0-2.1)
2	18 (15-23)	13 (11-16)	9.7 (7.9-12)	7.2 (5.6-9.4)	5.5 (4.0-7.6)	4.3 (3.0-6.3)	3.5 (2.2-5.3)	2.9 (1.8-4.6)	2.6 (1.5-4.2)	2.4 (1.3-3.9)	2.2 (1.2-3.6)
3	25 (20-30)	18 (14-22)	14 (11-18)	10 (7.7-14)	7.8 (5.5-11)	6.1 (4.0-9.5)	4.9 (3.0-8.0)	4.1 (2.4-7.0)	3.7 (2.0-6.4)	3.3 (1.7-5.9)	3.0 (1.5-5.5)
4	33 (26-38)	25 (19-29)	18 (14-23)	14 (10-18)	11 (8.0-15)	8.5 (6.2-12)	6.8 (4.7-10)	5.7 (3.7-9.0)	5.1 (3.1-8.2)	4.6 (2.7-7.6)	4.2 (2.3-7.1)
5	41 (37-46)	32 (28-36)	25 (21-29)	19 (16-23)	15 (12-18)	11 (9.4-15)	9.2 (7.5-13)	7.7 (6.1-11)	6.9 (5.2-9.8)	6.2 (4.5-9.0)	5.7 (4.0-8.4)
6	50	40	32	25	19	15	12	10	9.2	8.3	7.6

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	8.0	5.9	4.5	3.4	2.6	2.1	1.7	1.4	1.3	1.1	1.0
1	12 (9.9-15)	8.8 (7.2-11)	6.5 (5.2-8.2)	4.9 (3.9-6.1)	3.8 (2.9-4.7)	3.0 (2.2-3.6)	2.3 (1.7-2.9)	2.0 (1.4-2.4)	1.7 (1.2-2.1)	1.5 (1.1-1.8)	1.4 (0.9-1.7)
2	17 (13-22)	13 (9.7-17)	9.5 (7.1-13)	7.1 (5.2-9.6)	5.4 (3.9-7.4)	4.2 (2.9-5.8)	3.3 (2.2-4.6)	2.7 (1.8-3.8)	2.4 (1.5-3.4)	2.1 (1.3-3.0)	1.9 (1.1-2.7)
3	24 (19-31)	18 (14-24)	14 (9.9-18)	10 (7.2-14)	7.8 (5.3-11)	5.9 (4.0-8.6)	4.6 (3.0-6.8)	3.8 (2.4-5.7)	3.3 (2.0-5.0)	2.8 (1.7-4.4)	2.5 (1.5-4.0)
4	33 (26-40)	25 (19-31)	19 (14-24)	15 (11-19)	11 (7.9-14)	8.4 (5.9-11)	6.5 (4.5-9.0)	5.3 (3.6-7.5)	4.4 (3.0-6.5)	3.8 (2.6-5.8)	3.4 (2.2-5.2)
5	43 (36-48)	34 (28-39)	27 (21-31)	20 (16-24)	15 (12-19)	12 (9.2-15)	9.0 (7.1-12)	7.3 (5.7-9.5)	6.1 (4.8-8.1)	5.2 (4.1-7.1)	4.5 (3.6-6.3)
6	53	44	36	28	21	16	13	10	8.2	6.9	6.0

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Morocco.

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	6.8	5.3	4.1	3.2	2.5	2.0	1.6	1.4	1.2	1.1	1.0
1	11 (7.9-20)	8.4 (6.0-15)	6.5 (4.5-11)	5.0 (3.5-8.4)	3.9 (2.7-6.3)	3.0 (2.1-4.7)	2.4 (1.7-3.6)	2.0 (1.4-2.8)	1.7 (1.2-2.3)	1.5 (1.0-1.9)	1.3 (0.9-1.6)
2	17 (11-27)	13 (8.1-21)	10 (6.2-16)	7.7 (4.7-12)	5.9 (3.6-9.2)	4.5 (2.8-7.0)	3.5 (2.2-5.3)	2.9 (1.8-4.2)	2.4 (1.5-3.5)	2.1 (1.3-2.9)	1.8 (1.1-2.4)
3	25 (15-35)	19 (11-28)	15 (8.6-22)	12 (6.5-17)	8.9 (5.0-13)	6.8 (3.8-10)	5.2 (3.0-7.7)	4.2 (2.4-6.2)	3.5 (2.0-5.1)	2.9 (1.7-4.2)	2.5 (1.5-3.6)
4	34 (20-44)	28 (16-36)	22 (12-29)	17 (9.2-23)	13 (7.1-18)	10 (5.5-14)	7.8 (4.2-11)	6.2 (3.5-8.4)	5.0 (2.9-6.8)	4.1 (2.5-5.7)	3.4 (2.1-4.7)
5	45 (27-52)	38 (21-44)	31 (17-37)	25 (13-30)	19 (10-23)	15 (8.0-18)	11 (6.3-14)	9.0 (5.2-11)	7.2 (4.4-9.2)	5.8 (3.8-7.5)	4.8 (3.3-6.2)
6	57	49	41	34	27	21	17	13	10	8.3	6.7

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	5.9	4.7	3.7	3.0	2.4	1.9	1.6	1.4	1.2	1.1	0.9
1	9.2 (6.5-17)	7.3 (5.1-13)	5.8 (4.0-10)	4.6 (3.2-8.1)	3.7 (2.5-6.3)	2.9 (2.0-4.9)	2.4 (1.6-3.8)	2.0 (1.4-3.1)	1.7 (1.2-2.5)	1.5 (1.0-2.1)	1.3 (0.9-1.7)
2	14 (8.8-23)	11 (7.0-18)	8.9 (5.5-15)	7.0 (4.3-11)	5.6 (3.4-8.9)	4.4 (2.7-7.0)	3.5 (2.2-5.5)	2.9 (1.8-4.5)	2.5 (1.5-3.7)	2.1 (1.3-3.0)	1.8 (1.1-2.5)
3	20 (12-30)	17 (9.4-25)	13 (7.5-20)	11 (5.9-16)	8.3 (4.7-12)	6.6 (3.7-9.8)	5.2 (3.0-7.7)	4.3 (2.5-6.3)	3.6 (2.1-5.1)	3.0 (1.8-4.3)	2.5 (1.5-3.6)
4	28 (16-37)	23 (13-31)	19 (10-26)	15 (8.1-21)	12 (6.5-17)	9.7 (5.2-13)	7.7 (4.2-10)	6.3 (3.5-8.5)	5.2 (2.9-7.0)	4.3 (2.5-5.8)	3.6 (2.1-4.8)
5	38 (21-44)	32 (17-38)	27 (14-32)	22 (11-26)	18 (8.9-21)	14 (7.1-17)	11 (5.7-14)	9.1 (4.8-11)	7.5 (4.1-9.4)	6.1 (3.5-7.8)	5.0 (3.0-6.5)
6	49	42	36	30	24	20	16	13	11	8.7	7.2

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men from Morocco.

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	4.9	4.0	3.3	2.7	2.2	1.8	1.5	1.3	1.1	1.0	0.9
1	7.7 (5.3-14)	6.3 (4.3-12)	5.1 (3.5-9.4)	4.2 (2.8-7.6)	3.4 (2.3-6.1)	2.8 (1.9-4.9)	2.3 (1.6-4.0)	2.0 (1.3-3.4)	1.7 (1.1-2.8)	1.5 (1.0-2.4)	1.3 (0.8-2.0)
2	12 (7.2-20)	9.6 (5.8-16)	7.9 (4.8-13)	6.4 (3.9-11)	5.2 (3.1-8.7)	4.2 (2.6-7.0)	3.5 (2.1-5.7)	3.0 (1.8-4.8)	2.5 (1.5-4.0)	2.2 (1.3-3.3)	1.8 (1.1-2.8)
3	17 (9.6-26)	14 (7.9-21)	12 (6.5-18)	9.6 (5.3-15)	7.9 (4.3-12)	6.4 (3.5-9.7)	5.3 (2.9-8.0)	4.5 (2.5-6.7)	3.8 (2.1-5.6)	3.2 (1.8-4.7)	2.7 (1.5-3.9)
4	24 (13-32)	20 (11-28)	17 (8.7-23)	14 (7.2-19)	12 (5.9-16)	9.5 (4.8-13)	7.8 (4.0-11)	6.6 (3.4-9.1)	5.5 (2.9-7.7)	4.7 (2.5-6.4)	3.9 (2.1-5.4)
5	33 (18-39)	28 (15-34)	24 (12-29)	20 (9.9-24)	17 (8.1-20)	14 (6.6-17)	11 (5.5-14)	9.6 (4.7-12)	8.1 (4.0-10)	6.8 (3.5-8.6)	5.7 (3.0-7.3)
6	43	38	33	28	23	20	16	14	12	9.8	8.3

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	4.0	3.4	2.8	2.3	2.0	1.6	1.4	1.2	1.1	1.0	0.8
1	6.4 (4.4-12)	5.4 (3.7-10)	4.5 (3.1-8.6)	3.8 (2.5-7.2)	3.2 (2.1-6.0)	2.6 (1.8-5.0)	2.3 (1.5-4.2)	2.0 (1.3-3.6)	1.7 (1.1-3.1)	1.5 (1.0-2.7)	1.3 (0.9-2.3)
2	9.9 (5.9-17)	8.3 (5.0-14)	7.0 (4.2-12)	5.9 (3.5-10)	4.9 (2.9-8.6)	4.1 (2.4-7.2)	3.5 (2.1-6.1)	3.1 (1.8-5.3)	2.7 (1.6-4.5)	2.3 (1.4-3.9)	2.0 (1.2-3.3)
3	15 (8.0-22)	13 (6.7-19)	11 (5.6-16)	9.0 (4.7-14)	7.6 (4.0-12)	6.3 (3.3-9.8)	5.4 (2.9-8.5)	4.7 (2.5-7.3)	4.1 (2.2-6.3)	3.5 (1.9-5.4)	3.0 (1.6-4.7)
4	21 (11-29)	18 (9.1-25)	16 (7.7-21)	13 (6.5-18)	11 (5.4-16)	9.5 (4.5-13)	8.2 (3.9-11)	7.1 (3.4-10)	6.1 (3.0-8.6)	5.3 (2.6-7.5)	4.6 (2.3-6.4)
5	29 (15-35)	26 (13-30)	22 (11-27)	19 (9.0-23)	16 (7.6-20)	14 (6.4-17)	12 (5.5-15)	10 (4.8-13)	9.1 (4.2-11)	7.9 (3.6-9.8)	6.8 (3.1-8.5)
6	39	34	30	27	23	20	17	15	13	11	10