



Morocco - 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 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	4.7	2.4	1.2	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0
1	7.5 (5.0-9.8)	3.9 (2.6-5.1)	2.0 (1.3-2.6)	1.0 (0.7-1.4)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	12 (7.0-18)	6.2 (3.6-9.4)	3.2 (1.9-4.9)	1.7 (1.0-2.5)	0.8 (0.5-1.3)	0.4 (0.3-0.7)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
3	18 (10-28)	9.7 (5.5-16)	5.1 (2.8-8.4)	2.6 (1.4-4.3)	1.3 (0.7-2.2)	0.7 (0.4-1.1)	0.3 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
4	27 (17-40)	15 (9.3-23)	7.9 (4.8-12)	4.1 (2.5-6.6)	2.1 (1.3-3.4)	1.1 (0.7-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
5	39 (30-51)	22 (17-31)	12 (8.9-17)	6.3 (4.6-9.2)	3.3 (2.4-4.8)	1.7 (1.2-2.5)	0.9 (0.6-1.3)	0.5 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
6	53	32	18	9.6	5.0	2.6	1.3	0.7	0.4	0.2	0.1

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	5.3	2.9	1.5	0.8	0.4	0.2	0.1	0.1	0.0	0.0	0.0
1	8.2 (5.5-10)	4.5 (3.0-5.6)	2.4 (1.6-3.0)	1.3 (0.9-1.6)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	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	13 (7.8-18)	7.0 (4.2-10)	3.8 (2.3-5.6)	2.1 (1.2-3.0)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
3	19 (12-29)	11 (6.4-17)	6.0 (3.5-9.4)	3.2 (1.9-5.2)	1.8 (1.0-2.8)	0.9 (0.5-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
4	28 (19-40)	16 (11-24)	9.1 (5.9-14)	5.0 (3.2-7.8)	2.7 (1.8-4.3)	1.5 (0.9-2.3)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
5	39 (32-52)	24 (19-33)	14 (11-19)	7.6 (5.9-11)	4.2 (3.2-6.0)	2.3 (1.8-3.3)	1.2 (0.9-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
6	53	34	20	11	6.3	3.4	1.9	1.0	0.6	0.3	0.2

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	6.2	3.5	2.0	1.1	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	9.5 (6.5-11)	5.4 (3.7-6.4)	3.1 (2.1-3.6)	1.7 (1.2-2.0)	1.0 (0.7-1.1)	0.5 (0.4-0.6)	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	14 (9.1-19)	8.3 (5.2-11)	4.7 (2.9-6.5)	2.7 (1.7-3.7)	1.5 (0.9-2.1)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
3	21 (14-30)	12 (7.9-18)	7.2 (4.5-11)	4.1 (2.5-6.2)	2.3 (1.4-3.5)	1.3 (0.8-2.0)	0.7 (0.4-1.1)	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
4	30 (22-42)	18 (13-26)	11 (7.5-16)	6.2 (4.2-9.2)	3.5 (2.4-5.3)	2.0 (1.3-3.0)	1.1 (0.8-1.7)	0.6 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
5	41 (36-53)	26 (22-35)	16 (13-22)	9.2 (7.6-13)	5.2 (4.3-7.4)	3.0 (2.4-4.2)	1.7 (1.4-2.4)	1.0 (0.8-1.4)	0.6 (0.5-0.8)	0.3 (0.3-0.5)	0.2 (0.2-0.3)
6	55	37	23	13	7.8	4.4	2.5	1.5	0.9	0.5	0.3

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	7.1	4.2	2.4	1.4	0.8	0.5	0.3	0.2	0.1	0.1	0.0
1	11 (7.4-12)	6.3 (4.4-7.4)	3.7 (2.6-4.4)	2.2 (1.5-2.6)	1.3 (0.9-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	15 (10-20)	9.3 (6.2-12)	5.6 (3.6-7.3)	3.3 (2.1-4.3)	1.9 (1.2-2.5)	1.1 (0.7-1.5)	0.7 (0.4-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
3	22 (15-30)	14 (9.2-19)	8.2 (5.5-12)	4.9 (3.2-7.0)	2.9 (1.9-4.1)	1.7 (1.1-2.4)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	31 (24-41)	20 (15-27)	12 (9.0-17)	7.2 (5.3-10)	4.3 (3.1-6.2)	2.5 (1.8-3.7)	1.5 (1.1-2.2)	0.9 (0.7-1.4)	0.6 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.2-0.3)
5	41 (36-52)	27 (24-36)	17 (15-23)	11 (8.8-14)	6.3 (5.2-8.7)	3.7 (3.1-5.2)	2.3 (1.9-3.2)	1.4 (1.1-1.9)	0.8 (0.7-1.2)	0.5 (0.4-0.7)	0.3 (0.3-0.4)
6	53	37	24	15	9.2	5.5	3.3	2.0	1.2	0.7	0.5

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	7.1	4.4	2.7	1.7	1.0	0.6	0.4	0.3	0.2	0.1	0.1
1	12 (10-15)	7.2 (6.2-9.2)	4.5 (3.8-5.7)	2.7 (2.3-3.5)	1.7 (1.4-2.1)	1.0 (0.9-1.3)	0.7 (0.6-0.8)	0.4 (0.4-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	18 (15-24)	12 (9.3-15)	7.3 (5.8-9.8)	4.5 (3.6-6.1)	2.8 (2.2-3.8)	1.7 (1.3-2.3)	1.1 (0.9-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	28 (22-34)	18 (14-23)	12 (8.8-15)	7.3 (5.4-9.5)	4.5 (3.3-5.9)	2.8 (2.1-3.7)	1.8 (1.3-2.4)	1.1 (0.8-1.5)	0.7 (0.5-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.4)
4	40 (32-45)	28 (21-32)	18 (14-22)	12 (8.6-14)	7.4 (5.4-9.0)	4.6 (3.4-5.7)	3.0 (2.1-3.7)	1.9 (1.4-2.3)	1.2 (0.9-1.5)	0.8 (0.5-0.9)	0.5 (0.3-0.6)
5	54 (46-58)	40 (33-44)	28 (22-31)	18 (14-21)	12 (9.1-13)	7.5 (5.8-8.6)	4.8 (3.7-5.5)	3.1 (2.4-3.6)	2.0 (1.5-2.3)	1.2 (1.0-1.4)	0.8 (0.6-0.9)
6	67	54	40	28	18	12	7.8	5.0	3.2	2.0	1.3

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	6.9	4.5	2.9	1.8	1.2	0.8	0.5	0.3	0.2	0.2	0.1
1	13 (9.6-26)	8.5 (6.3-18)	5.6 (4.1-12)	3.6 (2.6-7.8)	2.3 (1.7-5.1)	1.5 (1.1-3.4)	1.0 (0.7-2.2)	0.7 (0.5-1.5)	0.5 (0.3-1.0)	0.3 (0.2-0.7)	0.2 (0.1-0.4)
2	22 (13-38)	15 (8.8-27)	10 (5.8-19)	6.7 (3.7-13)	4.3 (2.4-8.4)	2.9 (1.6-5.7)	1.9 (1.0-3.8)	1.3 (0.7-2.6)	0.9 (0.5-1.7)	0.6 (0.3-1.1)	0.4 (0.2-0.8)
3	34 (19-49)	24 (13-37)	17 (8.6-27)	12 (5.6-19)	7.7 (3.6-12)	5.2 (2.4-8.5)	3.5 (1.6-5.8)	2.3 (1.1-3.9)	1.6 (0.7-2.6)	1.0 (0.5-1.8)	0.7 (0.3-1.2)
4	48 (27-59)	37 (19-47)	27 (13-36)	19 (8.5-26)	13 (5.6-18)	8.9 (3.7-13)	6.1 (2.5-8.6)	4.1 (1.7-5.9)	2.7 (1.1-4.0)	1.8 (0.7-2.7)	1.2 (0.5-1.8)
5	61 (38-68)	51 (28-57)	40 (20-45)	29 (13-34)	21 (9.0-24)	15 (6.1-17)	10 (4.2-12)	7.0 (2.8-8.3)	4.7 (1.9-5.6)	3.2 (1.3-3.8)	2.1 (0.8-2.5)
6	73	65	54	43	32	23	17	11	7.9	5.3	3.6

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	6.7	4.5	3.1	2.1	1.4	1.0	0.7	0.5	0.3	0.2	0.2
1	12 (8.6-25)	8.4 (5.9-18)	5.8 (4.0-13)	4.0 (2.7-8.7)	2.8 (1.9-6.0)	1.9 (1.3-4.3)	1.4 (0.9-3.0)	0.9 (0.6-2.1)	0.7 (0.4-1.5)	0.5 (0.3-1.0)	0.3 (0.2-0.7)
2	20 (12-35)	14 (8.3-26)	10 (5.7-19)	7.1 (3.9-14)	5.0 (2.7-9.6)	3.5 (1.9-6.9)	2.5 (1.3-4.9)	1.7 (0.9-3.5)	1.2 (0.6-2.4)	0.9 (0.4-1.7)	0.6 (0.3-1.2)
3	30 (17-45)	23 (12-36)	17 (8.2-27)	12 (5.7-20)	8.5 (3.9-14)	6.1 (2.8-10)	4.3 (2.0-7.4)	3.1 (1.4-5.2)	2.2 (1.0-3.7)	1.5 (0.7-2.6)	1.1 (0.5-1.8)
4	42 (23-54)	33 (17-44)	26 (12-35)	19 (8.4-26)	14 (5.9-19)	10 (4.2-14)	7.3 (3.0-10)	5.2 (2.1-7.5)	3.7 (1.5-5.4)	2.6 (1.0-3.8)	1.8 (0.7-2.7)
5	55 (32-61)	46 (24-52)	37 (18-42)	28 (13-33)	21 (9.1-26)	16 (6.6-19)	12 (4.7-14)	8.5 (3.3-10)	6.1 (2.4-7.6)	4.3 (1.7-5.4)	3.1 (1.2-3.8)
6	66	58	49	40	31	24	18	13	9.8	7.0	5.0

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	6.2	4.5	3.2	2.3	1.7	1.3	0.9	0.7	0.5	0.4	0.3
1	11 (8.1-23)	8.2 (5.9-17)	6.0 (4.2-13)	4.4 (3.0-9.5)	3.2 (2.2-7.1)	2.4 (1.7-5.4)	1.8 (1.2-4.0)	1.3 (0.9-3.0)	1.0 (0.7-2.2)	0.7 (0.5-1.6)	0.5 (0.4-1.2)
2	18 (11-32)	14 (8.0-25)	10 (5.8-19)	7.6 (4.2-14)	5.7 (3.2-11)	4.3 (2.3-8.2)	3.2 (1.7-6.2)	2.4 (1.3-4.7)	1.8 (0.9-3.5)	1.3 (0.7-2.6)	1.0 (0.5-1.9)
3	27 (15-41)	21 (11-33)	16 (8.1-26)	12 (5.9-20)	9.5 (4.4-16)	7.2 (3.3-12)	5.5 (2.5-9.2)	4.1 (1.8-7.0)	3.1 (1.4-5.2)	2.3 (1.0-3.9)	1.7 (0.8-2.9)
4	38 (20-49)	31 (15-41)	25 (12-34)	19 (8.6-27)	15 (6.6-21)	12 (5.0-16)	8.9 (3.7-13)	6.8 (2.8-9.7)	5.1 (2.1-7.3)	3.8 (1.5-5.5)	2.9 (1.1-4.1)
5	49 (28-56)	42 (22-48)	35 (17-40)	28 (13-32)	23 (9.7-26)	18 (7.4-21)	14 (5.6-17)	11 (4.3-13)	8.2 (3.2-10)	6.2 (2.4-7.6)	4.7 (1.8-5.7)
6	61	54	46	39	32	26	21	17	13	9.8	7.5

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	5.7	4.3	3.3	2.5	2.0	1.6	1.2	1.0	0.7	0.6	0.5
1	10 (7.3-21)	7.8 (5.6-17)	6.0 (4.3-13)	4.7 (3.3-10)	3.7 (2.6-8.2)	2.9 (2.1-6.5)	2.3 (1.6-5.2)	1.8 (1.3-4.1)	1.4 (1.0-3.2)	1.1 (0.8-2.5)	0.9 (0.6-2.0)
2	16 (9.5-29)	13 (7.3-23)	10 (5.7-19)	8.0 (4.4-15)	6.4 (3.5-12)	5.1 (2.8-9.7)	4.1 (2.2-7.7)	3.2 (1.7-6.1)	2.5 (1.4-4.8)	2.0 (1.1-3.8)	1.6 (0.8-3.0)
3	24 (13-37)	20 (10-31)	16 (7.9-25)	13 (6.1-21)	10 (4.9-17)	8.4 (3.9-14)	6.8 (3.1-11)	5.4 (2.4-9.1)	4.3 (1.9-7.2)	3.4 (1.5-5.7)	2.7 (1.2-4.5)
4	34 (17-45)	28 (14-38)	24 (11-32)	19 (8.6-27)	16 (7.0-23)	13 (5.6-19)	11 (4.5-15)	8.7 (3.6-12)	7.0 (2.8-10)	5.5 (2.3-8.0)	4.4 (1.8-6.4)
5	45 (24-51)	39 (20-45)	33 (16-38)	28 (13-33)	24 (10-28)	20 (8.3-23)	16 (6.7-19)	13 (5.4-16)	11 (4.3-13)	8.8 (3.4-10)	7.0 (2.7-8.4)
6	56	50	44	38	33	28	24	20	16	13	11