

Tunisia - 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 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 Tunisia. 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	2.8	1.8	1.2	0.9	0.7	0.5	0.5	0.4	0.4	0.4	0.4	
1	4.5 (3.8-5.8)	2.8 (2.4-3.6)	1.8 (1.5-2.3)	1.3 (1.0-1.7)	1.0 (0.7-1.3)	0.8 (0.6-1.1)	0.7 (0.5-0.9)	0.6 (0.4-0.9)	0.6 (0.4-0.8)	0.6 (0.4-0.8)	0.5 (0.3-0.8)	
2	6.9 (5.2-10)	4.3 (3.3-6.2)	2.8 (2.1-4.0)	2.0 (1.4-2.9)	1.5 (0.9-2.4)	1.2 (0.7-2.0)	1.0 (0.6-1.7)	0.9 (0.5-1.6)	0.9 (0.5-1.5)	0.8 (0.4-1.5)	0.8 (0.4-1.4)	
3	11 (7.1-15)	6.5 (4.5-8.9)	4.3 (2.9-6.3)	3.0 (1.9-4.8)	2.3 (1.3-3.9)	1.8 (0.9-3.3)	1.5 (0.7-2.8)	1.4 (0.6-2.6)	1.3 (0.6-2.5)	1.2 (0.6-2.4)	1.2 (0.5-2.3)	
4	16 (10-22)	9.8 (6.2-13)	6.4 (4.0-8.3)	4.4 (2.8-6.3)	3.3 (2.1-5.1)	2.6 (1.6-4.3)	2.2 (1.2-3.7)	2.0 (1.1-3.4)	1.8 (1.0-3.2)	1.8 (0.9-3.1)	1.7 (0.9-3.0)	
5	23 (17-29)	14 (11-17)	9.4 (6.9-11)	6.5 (4.8-7.9)	4.8 (3.6-6.2)	3.8 (2.8-5.1)	3.1 (2.3-4.4)	2.8 (2.0-4.0)	2.6 (1.8-3.8)	2.5 (1.7-3.6)	2.4 (1.6-3.5)	
6	33	21	13	9.3	6.8	5.4	4.4	3.9	3.7	3.5	3.3	

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

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	3.1	2.0	1.4	1.0	0.8	0.6	0.5	0.5	0.5	0.4	0.4
1	4.7 (4.2-5.8)	3.1 (2.7-3.8)	2.1 (1.8-2.6)	1.6 (1.2-1.9)	1.2 (0.9-1.5)	1.0 (0.7-1.3)	0.8 (0.6-1.1)	0.7 (0.5-1.0)	0.7 (0.5-1.0)	0.7 (0.4-0.9)	0.6 (0.4-0.9)
2	7.2 (5.6-10)	4.7 (3.8-6.5)	3.2 (2.4-4.4)	2.3 (1.6-3.4)	1.8 (1.1-2.8)	1.4 (0.9-2.3)	1.2 (0.7-2.0)	1.1 (0.6-1.9)	1.0 (0.5-1.8)	1.0 (0.5-1.7)	0.9 (0.5-1.6)
3	11 (7.7-14)	7.0 (5.1-9.4)	4.8 (3.3-7.0)	3.5 (2.2-5.5)	2.6 (1.5-4.5)	2.1 (1.1-3.8)	1.8 (0.9-3.2)	1.6 (0.8-3.0)	1.5 (0.7-2.8)	1.4 (0.6-2.7)	1.3 (0.6-2.6)
4	16 (11-20)	10 (6.9-13)	7.0 (4.7-9.3)	5.1 (3.4-7.2)	3.8 (2.6-5.8)	3.1 (1.9-4.9)	2.5 (1.5-4.2)	2.3 (1.3-3.9)	2.1 (1.1-3.6)	2.0 (1.0-3.5)	1.9 (1.0-3.3)
5	23 (18-27)	15 (12-17)	10 (7.9-12)	7.3 (5.6-9.0)	5.5 (4.2-7.1)	4.3 (3.3-5.9)	3.6 (2.7-5.0)	3.2 (2.3-4.6)	3.0 (2.1-4.3)	2.8 (1.9-4.1)	2.6 (1.8-3.9)
6	32	21	14	10	7.7	6.1	5.0	4.5	4.1	3.9	3.7

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	3.6	2.4	1.7	1.3	1.0	0.8	0.7	0.6	0.6	0.5	0.5
1	5.4 (4.9-6.3)	3.6 (3.2-4.3)	2.6 (2.1-3.1)	1.9 (1.5-2.3)	1.5 (1.1-1.9)	1.2 (0.8-1.6)	1.0 (0.7-1.4)	0.9 (0.6-1.3)	0.8 (0.5-1.2)	0.8 (0.5-1.1)	0.7 (0.5-1.0)
2	8.0 (6.4-11)	5.4 (4.3-7.2)	3.8 (2.9-5.0)	2.8 (2.0-4.0)	2.2 (1.4-3.3)	1.7 (1.1-2.7)	1.5 (0.8-2.4)	1.3 (0.7-2.2)	1.2 (0.7-2.1)	1.1 (0.6-2.0)	1.1 (0.6-1.8)
3	12 (8.6-15)	7.9 (5.9-11)	5.6 (3.9-8.1)	4.1 (2.7-6.4)	3.1 (1.9-5.2)	2.5 (1.4-4.4)	2.1 (1.1-3.8)	1.9 (1.0-3.5)	1.8 (0.9-3.3)	1.6 (0.8-3.1)	1.5 (0.7-2.9)
4	17 (12-20)	11 (8.0-14)	8.0 (5.6-11)	5.9 (4.1-8.4)	4.5 (3.1-6.8)	3.6 (2.3-5.7)	3.0 (1.8-4.9)	2.7 (1.5-4.6)	2.5 (1.4-4.3)	2.3 (1.2-4.0)	2.2 (1.1-3.7)
5	23 (19-27)	16 (13-18)	11 (9.1-13)	8.3 (6.6-10)	6.3 (5.0-8.3)	5.0 (4.0-6.8)	4.2 (3.2-5.9)	3.8 (2.7-5.4)	3.5 (2.4-5.0)	3.2 (2.2-4.7)	3.0 (2.0-4.4)
6	31	22	16	11	8.7	6.9	5.8	5.2	4.7	4.4	4.1

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

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	3.8	2.7	1.9	1.4	1.1	0.9	0.8	0.7	0.6	0.6	0.5
1	5.6 (4.9-6.4)	3.9 (3.3-4.5)	2.8 (2.3-3.2)	2.1 (1.6-2.5)	1.6 (1.2-2.1)	1.3 (0.9-1.7)	1.1 (0.8-1.5)	1.0 (0.7-1.4)	0.9 (0.6-1.3)	0.8 (0.5-1.2)	0.8 (0.5-1.1)
2	8.0 (6.5-10)	5.6 (4.5-7.1)	4.1 (3.1-5.4)	3.0 (2.2-4.3)	2.3 (1.6-3.5)	1.9 (1.2-2.9)	1.6 (1.0-2.6)	1.4 (0.8-2.4)	1.3 (0.7-2.2)	1.2 (0.6-2.0)	1.1 (0.6-1.9)
3	11 (8.8-14)	8.0 (6.2-11)	5.8 (4.2-8.3)	4.3 (2.9-6.6)	3.3 (2.1-5.4)	2.6 (1.5-4.5)	2.3 (1.3-4.0)	2.0 (1.1-3.7)	1.9 (0.9-3.4)	1.7 (0.8-3.1)	1.6 (0.8-2.9)
4	16 (12-19)	11 (8.3-14)	8.1 (6.0-11)	6.0 (4.4-8.6)	4.7 (3.3-7.0)	3.7 (2.4-5.8)	3.2 (2.0-5.2)	2.9 (1.7-4.7)	2.6 (1.4-4.4)	2.4 (1.3-4.1)	2.2 (1.2-3.8)
5	21 (18-24)	15 (13-18)	11 (9.2-14)	8.3 (6.8-11)	6.4 (5.2-8.6)	5.1 (4.1-7.0)	4.4 (3.3-6.2)	3.9 (2.8-5.6)	3.5 (2.4-5.2)	3.2 (2.2-4.8)	3.0 (2.0-4.4)
6	28	20	15	11	8.6	6.8	5.9	5.2	4.7	4.4	4.0

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	3.5	2.6	1.9	1.4	1.1	0.9	0.8	0.7	0.6	0.6	0.5
1	5.2 (4.2-6.6)	3.7 (2.9-4.7)	2.7 (2.1-3.4)	2.0 (1.5-2.5)	1.6 (1.1-1.9)	1.3 (0.9-1.5)	1.1 (0.7-1.3)	1.0 (0.6-1.1)	0.8 (0.6-1.0)	0.8 (0.5-0.9)	0.7 (0.5-0.9)
2	7.7 (5.8-10)	5.5 (4.0-7.3)	3.9 (2.8-5.4)	2.9 (2.0-4.0)	2.2 (1.5-3.1)	1.8 (1.1-2.5)	1.5 (0.9-2.1)	1.3 (0.8-1.9)	1.1 (0.7-1.7)	1.0 (0.6-1.5)	0.9 (0.6-1.4)
3	11 (8.1-15)	7.9 (5.6-11)	5.7 (3.9-8.0)	4.1 (2.8-6.0)	3.1 (2.0-4.6)	2.4 (1.5-3.7)	2.0 (1.3-3.2)	1.8 (1.1-2.8)	1.5 (0.9-2.5)	1.4 (0.8-2.2)	1.2 (0.7-2.0)
4	16 (12-20)	11 (8.3-15)	8.1 (5.8-11)	5.9 (4.1-8.0)	4.3 (3.0-6.1)	3.4 (2.3-4.9)	2.8 (1.8-4.1)	2.4 (1.5-3.6)	2.1 (1.3-3.2)	1.8 (1.2-2.9)	1.6 (1.0-2.6)
5	23 (18-26)	16 (13-19)	12 (8.9-14)	8.3 (6.4-10)	6.1 (4.7-7.9)	4.6 (3.6-6.2)	3.8 (3.0-5.2)	3.2 (2.5-4.4)	2.7 (2.2-3.9)	2.4 (1.9-3.4)	2.1 (1.7-3.1)
6	31	23	16	12	8.5	6.4	5.1	4.2	3.6	3.1	2.8

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

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	3.1	2.3	1.8	1.4	1.1	0.9	0.8	0.7	0.6	0.5	0.5
1	5.0 (3.4-8.8)	3.6 (2.5-6.2)	2.7 (1.8-4.4)	2.0 (1.4-3.1)	1.5 (1.0-2.2)	1.3 (0.8-1.7)	1.1 (0.7-1.4)	0.9 (0.6-1.1)	0.8 (0.5-1.0)	0.7 (0.5-0.9)	0.6 (0.4-0.8)
2	7.7 (4.7-12)	5.6 (3.4-8.9)	4.1 (2.5-6.4)	3.0 (1.8-4.6)	2.2 (1.4-3.3)	1.8 (1.1-2.6)	1.5 (0.9-2.1)	1.2 (0.8-1.7)	1.1 (0.7-1.4)	0.9 (0.6-1.2)	0.8 (0.5-1.1)
3	12 (6.5-17)	8.5 (4.7-13)	6.2 (3.4-9.1)	4.5 (2.5-6.6)	3.3 (1.8-4.8)	2.5 (1.5-3.7)	2.0 (1.2-3.0)	1.7 (1.0-2.4)	1.4 (0.9-2.0)	1.2 (0.8-1.7)	1.0 (0.7-1.5)
4	17 (9.0-23)	13 (6.5-17)	9.2 (4.8-13)	6.6 (3.5-9.1)	4.8 (2.6-6.6)	3.7 (2.1-5.1)	2.9 (1.7-4.0)	2.3 (1.4-3.3)	1.9 (1.2-2.7)	1.6 (1.1-2.3)	1.4 (0.9-2.0)
5	25 (13-30)	18 (9.4-23)	14 (6.9-17)	9.8 (5.1-12)	7.0 (3.9-8.9)	5.3 (3.1-6.8)	4.1 (2.6-5.3)	3.2 (2.2-4.3)	2.6 (1.9-3.5)	2.1 (1.6-2.9)	1.8 (1.5-2.4)
6	34	26	19	14	10	7.7	5.8	4.5	3.5	2.8	2.3

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	2.9	2.2	1.7	1.3	1.1	0.9	0.8	0.7	0.6	0.5	0.5
1	4.4 (2.9-7.8)	3.3 (2.2-5.7)	2.5 (1.7-4.2)	1.9 (1.3-3.1)	1.5 (1.0-2.3)	1.3 (0.8-1.8)	1.1 (0.7-1.5)	0.9 (0.6-1.2)	0.8 (0.5-1.0)	0.7 (0.5-0.8)	0.6 (0.4-0.7)
2	6.6 (4.0-11)	5.0 (3.0-8.1)	3.7 (2.3-5.9)	2.8 (1.7-4.3)	2.2 (1.3-3.3)	1.8 (1.1-2.6)	1.5 (0.9-2.1)	1.2 (0.8-1.7)	1.1 (0.7-1.4)	0.9 (0.6-1.2)	0.8 (0.5-1.0)
3	9.9 (5.4-15)	7.4 (4.1-11)	5.5 (3.1-8.2)	4.1 (2.3-6.1)	3.2 (1.8-4.5)	2.5 (1.5-3.6)	2.0 (1.2-2.9)	1.7 (1.0-2.4)	1.4 (0.9-2.0)	1.2 (0.7-1.7)	1.0 (0.6-1.4)
4	14 (7.4-20)	11 (5.6-15)	8.1 (4.2-11)	6.0 (3.2-8.2)	4.5 (2.4-6.2)	3.6 (2.0-4.9)	2.9 (1.6-3.9)	2.3 (1.4-3.2)	1.9 (1.2-2.7)	1.6 (1.0-2.2)	1.3 (0.9-1.9)
5	20 (10-25)	15 (7.7-19)	12 (5.8-15)	8.7 (4.4-11)	6.5 (3.4-8.4)	5.1 (2.8-6.6)	4.0 (2.4-5.3)	3.2 (2.0-4.3)	2.6 (1.7-3.5)	2.1 (1.5-2.9)	1.7 (1.3-2.4)
6	28	22	16	12	9.3	7.2	5.6	4.4	3.5	2.8	2.3

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

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	2.7	2.1	1.7	1.3	1.1	1.0	0.8	0.7	0.6	0.6	0.5
1	4.0 (2.6-7.0)	3.1 (2.0-5.3)	2.5 (1.6-4.1)	1.9 (1.2-3.1)	1.6 (1.0-2.5)	1.3 (0.9-2.0)	1.1 (0.7-1.6)	1.0 (0.6-1.4)	0.9 (0.5-1.1)	0.7 (0.5-0.9)	0.7 (0.4-0.8)
2	6.0 (3.5-9.8)	4.6 (2.7-7.5)	3.6 (2.1-5.7)	2.8 (1.6-4.3)	2.3 (1.3-3.4)	1.9 (1.1-2.8)	1.6 (1.0-2.3)	1.3 (0.8-1.9)	1.1 (0.7-1.6)	1.0 (0.6-1.4)	0.8 (0.5-1.2)
3	8.8 (4.8-13)	6.8 (3.7-10)	5.2 (2.9-7.8)	4.0 (2.2-5.9)	3.2 (1.8-4.7)	2.7 (1.5-3.8)	2.2 (1.3-3.1)	1.8 (1.1-2.6)	1.5 (0.9-2.2)	1.3 (0.8-1.8)	1.1 (0.7-1.6)
4	13 (6.6-17)	9.8 (5.1-13)	7.6 (3.9-10)	5.8 (3.0-8.0)	4.7 (2.5-6.4)	3.8 (2.0-5.2)	3.1 (1.7-4.2)	2.5 (1.4-3.5)	2.1 (1.2-2.9)	1.7 (1.0-2.4)	1.5 (0.9-2.1)
5	18 (8.9-22)	14 (7.0-17)	11 (5.4-14)	8.3 (4.2-11)	6.7 (3.5-8.6)	5.4 (2.9-7.0)	4.3 (2.4-5.7)	3.5 (2.0-4.7)	2.9 (1.7-3.9)	2.4 (1.5-3.2)	2.0 (1.3-2.7)
6	25	20	15	12	9.5	7.6	6.1	4.9	4.0	3.2	2.6

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	2.6	2.1	1.7	1.4	1.2	1.0	0.9	0.8	0.7	0.6	0.5
1	3.8 (2.5-6.4)	3.0 (2.0-5.1)	2.4 (1.6-4.0)	2.0 (1.3-3.2)	1.7 (1.1-2.7)	1.4 (0.9-2.2)	1.2 (0.8-1.9)	1.1 (0.7-1.6)	0.9 (0.6-1.3)	0.8 (0.5-1.1)	0.7 (0.4-0.9)
2	5.6 (3.3-9.0)	4.4 (2.6-7.1)	3.5 (2.1-5.6)	2.9 (1.7-4.5)	2.4 (1.4-3.7)	2.0 (1.2-3.1)	1.7 (1.0-2.6)	1.5 (0.9-2.2)	1.3 (0.8-1.9)	1.1 (0.6-1.6)	0.9 (0.6-1.3)
3	8.1 (4.5-12)	6.5 (3.5-9.6)	5.1 (2.8-7.6)	4.1 (2.3-6.1)	3.5 (1.9-5.1)	2.9 (1.6-4.2)	2.4 (1.4-3.5)	2.1 (1.2-3.0)	1.7 (1.0-2.5)	1.5 (0.8-2.1)	1.3 (0.7-1.8)
4	12 (6.1-16)	9.3 (4.9-13)	7.4 (3.9-10)	6.0 (3.1-8.2)	5.0 (2.6-6.9)	4.1 (2.2-5.7)	3.4 (1.8-4.8)	2.9 (1.6-4.0)	2.4 (1.3-3.4)	2.0 (1.1-2.8)	1.7 (1.0-2.4)
5	16 (8.3-20)	13 (6.7-17)	11 (5.3-13)	8.5 (4.3-11)	7.1 (3.6-9.1)	5.9 (3.1-7.6)	4.9 (2.6-6.4)	4.1 (2.2-5.4)	3.4 (1.9-4.5)	2.8 (1.6-3.8)	2.4 (1.4-3.2)
6	23	18	15	12	10	8.4	6.9	5.7	4.8	3.9	3.3