

Tunisia - 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 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	3.5	2.1	1.3	0.9	0.7	0.5	0.4	0.4	0.3	0.3	0.3	
1	5.4 (4.3-7.1)	3.3 (2.8-4.2)	2.1 (1.8-2.7)	1.4 (1.2-1.8)	1.0 (0.8-1.3)	0.8 (0.6-1.0)	0.6 (0.4-0.8)	0.5 (0.4-0.7)	0.5 (0.3-0.7)	0.5 (0.3-0.6)	0.4 (0.3-0.6)	
2	8.4 (5.9-12)	5.0 (3.8-7.4)	3.2 (2.5-4.6)	2.1 (1.6-3.0)	1.5 (1.0-2.3)	1.2 (0.7-1.9)	1.0 (0.6-1.6)	0.8 (0.4-1.4)	0.7 (0.4-1.3)	0.7 (0.4-1.2)	0.7 (0.3-1.2)	
3	13 (8.3-18)	7.6 (5.2-11)	4.8 (3.3-6.5)	3.2 (2.2-4.8)	2.3 (1.4-3.7)	1.7 (1.0-3.0)	1.4 (0.7-2.6)	1.2 (0.6-2.2)	1.1 (0.5-2.0)	1.0 (0.5-1.9)	1.0 (0.4-1.9)	
4	19 (12-26)	11 (7.3-15)	7.2 (4.6-9.1)	4.8 (3.0-6.3)	3.4 (2.2-4.9)	2.6 (1.7-3.9)	2.0 (1.2-3.3)	1.7 (1.0-2.9)	1.5 (0.8-2.6)	1.4 (0.7-2.5)	1.4 (0.7-2.4)	
5	27 (20-34)	17 (12-21)	11 (7.7-12)	7.0 (5.1-8.1)	4.9 (3.6-6.1)	3.7 (2.7-4.8)	2.9 (2.2-4.0)	2.4 (1.8-3.4)	2.1 (1.5-3.1)	2.0 (1.4-3.0)	1.9 (1.3-2.8)	
6	37	24	15	10	7.0	5.2	4.1	3.4	3.0	2.8	2.7	

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	3.5	2.2	1.4	1.0	0.7	0.6	0.5	0.4	0.4	0.3	0.3
1	5.4 (4.5-6.7)	3.4 (3.0-4.2)	2.2 (1.9-2.7)	1.5 (1.2-1.9)	1.1 (0.9-1.4)	0.9 (0.6-1.1)	0.7 (0.5-0.9)	0.6 (0.4-0.8)	0.5 (0.3-0.7)	0.5 (0.3-0.7)	0.5 (0.3-0.7)
2	8.1 (6.1-11)	5.1 (3.9-7.0)	3.3 (2.6-4.6)	2.3 (1.7-3.1)	1.7 (1.2-2.4)	1.3 (0.8-2.0)	1.0 (0.6-1.7)	0.9 (0.5-1.4)	0.8 (0.4-1.3)	0.7 (0.4-1.3)	0.7 (0.4-1.2)
3	12 (8.3-16)	7.5 (5.3-9.9)	4.9 (3.5-6.6)	3.4 (2.4-4.9)	2.4 (1.6-3.8)	1.9 (1.1-3.1)	1.5 (0.8-2.6)	1.2 (0.6-2.3)	1.1 (0.5-2.1)	1.0 (0.5-2.0)	1.0 (0.5-1.9)
4	17 (12-22)	11 (7.4-14)	7.2 (4.8-8.8)	4.9 (3.3-6.5)	3.5 (2.4-5.1)	2.7 (1.8-4.1)	2.1 (1.3-3.4)	1.8 (1.0-2.9)	1.6 (0.9-2.7)	1.5 (0.8-2.5)	1.4 (0.7-2.4)
5	24 (19-30)	16 (12-19)	10 (7.9-12)	7.0 (5.4-8.4)	5.0 (3.8-6.3)	3.8 (2.9-5.0)	3.0 (2.3-4.2)	2.5 (1.9-3.5)	2.2 (1.6-3.2)	2.1 (1.4-3.0)	1.9 (1.3-2.9)
6	33	22	14	9.9	7.1	5.3	4.2	3.4	3.0	2.8	2.6

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	3.4	2.2	1.5	1.1	0.8	0.7	0.5	0.4	0.4	0.4	0.3
1	5.0 (4.4-6.0)	3.3 (2.9-4.0)	2.3 (1.9-2.8)	1.6 (1.3-2.0)	1.2 (0.9-1.5)	1.0 (0.7-1.2)	0.8 (0.5-1.0)	0.6 (0.4-0.9)	0.6 (0.4-0.8)	0.5 (0.3-0.8)	0.5 (0.3-0.7)
2	7.2 (5.6-9.5)	4.8 (3.8-6.4)	3.4 (2.7-4.4)	2.4 (1.8-3.2)	1.8 (1.3-2.6)	1.4 (0.9-2.1)	1.1 (0.7-1.8)	0.9 (0.5-1.5)	0.8 (0.5-1.4)	0.8 (0.4-1.4)	0.7 (0.4-1.3)
3	10 (7.6-13)	7.0 (5.1-8.9)	4.8 (3.6-6.5)	3.5 (2.5-5.0)	2.6 (1.7-4.0)	2.0 (1.2-3.3)	1.6 (0.9-2.8)	1.3 (0.7-2.4)	1.2 (0.6-2.2)	1.1 (0.5-2.1)	1.0 (0.5-2.0)
4	15 (11-18)	9.9 (7.1-12)	6.9 (4.9-8.6)	4.9 (3.5-6.6)	3.7 (2.6-5.3)	2.8 (1.9-4.3)	2.3 (1.4-3.6)	1.9 (1.1-3.1)	1.7 (0.9-2.9)	1.6 (0.8-2.7)	1.4 (0.8-2.5)
5	20 (16-23)	14 (11-16)	9.6 (7.6-11)	6.9 (5.4-8.5)	5.1 (4.0-6.6)	3.9 (3.0-5.3)	3.1 (2.4-4.4)	2.6 (2.0-3.7)	2.3 (1.7-3.4)	2.1 (1.5-3.2)	2.0 (1.3-3.0)
6	27	19	13	9.4	7.0	5.4	4.3	3.5	3.1	2.9	2.7

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	3.0	2.1	1.5	1.1	0.9	0.7	0.5	0.5	0.4	0.4	0.3
1	4.2 (3.7-4.9)	3.0 (2.5-3.5)	2.2 (1.8-2.5)	1.6 (1.3-1.9)	1.2 (0.9-1.5)	1.0 (0.7-1.2)	0.8 (0.5-1.0)	0.7 (0.4-0.9)	0.6 (0.4-0.8)	0.5 (0.3-0.8)	0.5 (0.3-0.7)
2	6.0 (4.6-7.4)	4.2 (3.3-5.3)	3.1 (2.4-3.9)	2.3 (1.7-3.1)	1.7 (1.2-2.5)	1.4 (0.9-2.1)	1.1 (0.7-1.7)	0.9 (0.6-1.5)	0.8 (0.5-1.4)	0.8 (0.4-1.3)	0.7 (0.4-1.2)
3	8.3 (6.3-10)	5.9 (4.5-7.4)	4.3 (3.3-5.7)	3.2 (2.4-4.5)	2.4 (1.7-3.7)	1.9 (1.2-3.0)	1.5 (0.9-2.5)	1.3 (0.7-2.2)	1.2 (0.6-2.0)	1.1 (0.5-1.9)	1.0 (0.5-1.8)
4	11 (8.8-14)	8.1 (6.2-9.9)	5.9 (4.5-7.6)	4.4 (3.3-6.0)	3.4 (2.5-4.8)	2.6 (1.9-4.0)	2.1 (1.4-3.3)	1.8 (1.1-2.9)	1.6 (0.9-2.7)	1.4 (0.8-2.5)	1.3 (0.7-2.3)
5	15 (13-17)	11 (9.0-13)	8.0 (6.5-9.8)	6.0 (4.8-7.6)	4.6 (3.7-6.0)	3.6 (2.8-4.9)	2.9 (2.3-4.1)	2.4 (1.8-3.5)	2.1 (1.6-3.2)	1.9 (1.4-2.9)	1.8 (1.2-2.7)
6	20	14	11	8.0	6.1	4.7	3.8	3.2	2.8	2.6	2.4

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	2.3	1.7	1.3	1.0	0.8	0.6	0.5	0.4	0.4	0.3	0.3
1	3.4 (2.7-4.5)	2.5 (1.9-3.2)	1.9 (1.4-2.4)	1.4 (1.0-1.8)	1.1 (0.8-1.4)	0.8 (0.6-1.1)	0.7 (0.5-0.8)	0.6 (0.4-0.7)	0.5 (0.3-0.6)	0.5 (0.3-0.6)	0.4 (0.3-0.5)
2	5.0 (3.7-6.9)	3.7 (2.7-5.1)	2.7 (1.9-3.8)	2.0 (1.4-2.8)	1.5 (1.1-2.2)	1.2 (0.8-1.7)	0.9 (0.6-1.4)	0.8 (0.5-1.2)	0.7 (0.4-1.0)	0.6 (0.4-0.9)	0.5 (0.3-0.8)
3	7.3 (5.3-9.7)	5.3 (3.8-7.2)	3.9 (2.7-5.4)	2.9 (2.0-4.1)	2.2 (1.5-3.1)	1.7 (1.1-2.4)	1.3 (0.8-1.9)	1.1 (0.7-1.6)	0.9 (0.6-1.4)	0.8 (0.5-1.3)	0.7 (0.4-1.2)
4	11 (7.6-13)	7.7 (5.4-10)	5.6 (3.9-7.4)	4.1 (2.8-5.5)	3.1 (2.1-4.2)	2.3 (1.6-3.3)	1.8 (1.2-2.6)	1.5 (1.0-2.2)	1.2 (0.8-1.9)	1.1 (0.7-1.7)	1.0 (0.6-1.5)
5	15 (11-18)	11 (8.3-13)	8.1 (6.0-10)	5.9 (4.4-7.5)	4.4 (3.3-5.6)	3.3 (2.5-4.3)	2.5 (1.9-3.4)	2.0 (1.5-2.8)	1.7 (1.3-2.4)	1.4 (1.1-2.1)	1.3 (1.0-1.8)
6	21	16	11	8.4	6.2	4.6	3.5	2.7	2.3	1.9	1.6

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	1.7	1.3	1.0	0.8	0.7	0.5	0.4	0.4	0.3	0.3	0.3
1	2.8 (1.9-5.4)	2.2 (1.4-4.0)	1.6 (1.1-3.0)	1.3 (0.8-2.2)	1.0 (0.6-1.6)	0.8 (0.5-1.2)	0.6 (0.4-0.9)	0.5 (0.3-0.8)	0.5 (0.3-0.6)	0.4 (0.3-0.5)	0.4 (0.2-0.4)
2	4.5 (2.6-7.8)	3.4 (2.0-5.8)	2.6 (1.5-4.3)	2.0 (1.1-3.2)	1.5 (0.9-2.4)	1.2 (0.7-1.8)	0.9 (0.5-1.4)	0.7 (0.4-1.1)	0.6 (0.4-0.9)	0.5 (0.3-0.8)	0.5 (0.3-0.7)
3	7.1 (3.6-11)	5.3 (2.7-8.2)	4.0 (2.1-6.1)	3.0 (1.6-4.6)	2.3 (1.2-3.4)	1.7 (0.9-2.6)	1.3 (0.7-2.0)	1.1 (0.6-1.6)	0.9 (0.5-1.3)	0.7 (0.4-1.1)	0.6 (0.4-0.9)
4	11 (5.2-15)	8.1 (3.9-11)	6.1 (2.9-8.5)	4.6 (2.2-6.4)	3.4 (1.7-4.8)	2.6 (1.3-3.6)	1.9 (1.0-2.7)	1.5 (0.8-2.2)	1.3 (0.7-1.8)	1.0 (0.6-1.5)	0.9 (0.5-1.2)
5	16 (7.4-20)	12 (5.6-15)	9.2 (4.2-11)	6.9 (3.2-8.7)	5.1 (2.5-6.5)	3.8 (1.9-4.9)	2.9 (1.5-3.7)	2.3 (1.2-3.0)	1.8 (1.1-2.4)	1.4 (0.9-2.0)	1.2 (0.8-1.6)
6	23	18	14	10	7.6	5.7	4.2	3.3	2.6	2.0	1.6

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	1.3	1.1	0.9	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.2
1	2.2 (1.4-4.2)	1.7 (1.1-3.2)	1.3 (0.9-2.5)	1.1 (0.7-1.9)	0.8 (0.6-1.5)	0.7 (0.4-1.2)	0.6 (0.4-0.9)	0.5 (0.3-0.7)	0.4 (0.3-0.6)	0.4 (0.2-0.5)	0.3 (0.2-0.4)
2	3.4 (2.0-6.0)	2.7 (1.5-4.6)	2.1 (1.2-3.6)	1.6 (1.0-2.8)	1.3 (0.8-2.1)	1.0 (0.6-1.6)	0.8 (0.5-1.3)	0.7 (0.4-1.0)	0.6 (0.4-0.9)	0.5 (0.3-0.7)	0.4 (0.3-0.6)
3	5.3 (2.7-8.3)	4.1 (2.1-6.4)	3.2 (1.7-4.9)	2.5 (1.3-3.8)	1.9 (1.0-2.9)	1.5 (0.8-2.3)	1.2 (0.7-1.8)	1.0 (0.6-1.4)	0.8 (0.5-1.2)	0.7 (0.4-1.0)	0.6 (0.3-0.8)
4	8.0 (3.7-11)	6.2 (2.9-8.8)	4.8 (2.3-6.8)	3.7 (1.8-5.3)	2.9 (1.4-4.1)	2.2 (1.1-3.2)	1.8 (0.9-2.5)	1.4 (0.8-2.0)	1.2 (0.6-1.6)	1.0 (0.5-1.4)	0.8 (0.5-1.1)
5	12 (5.3-15)	9.2 (4.1-11)	7.2 (3.2-9.0)	5.6 (2.5-7.0)	4.3 (2.0-5.4)	3.3 (1.6-4.2)	2.6 (1.3-3.3)	2.1 (1.1-2.7)	1.7 (0.9-2.2)	1.4 (0.8-1.9)	1.1 (0.7-1.5)
6	17	13	11	8.2	6.3	4.9	3.8	3.0	2.5	2.0	1.6

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	1.1	0.9	0.8	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2	
1	1.8 (1.2-3.3)	1.4 (0.9-2.7)	1.2 (0.8-2.1)	1.0 (0.6-1.7)	0.8 (0.5-1.4)	0.6 (0.4-1.1)	0.5 (0.4-0.9)	0.5 (0.3-0.8)	0.4 (0.3-0.7)	0.4 (0.2-0.6)	0.3 (0.2-0.5)	
2	2.8 (1.6-4.8)	2.2 (1.3-3.8)	1.8 (1.0-3.1)	1.5 (0.8-2.5)	1.2 (0.7-2.0)	1.0 (0.6-1.6)	0.8 (0.5-1.3)	0.7 (0.4-1.1)	0.6 (0.4-0.9)	0.5 (0.3-0.8)	0.4 (0.3-0.7)	
3	4.2 (2.2-6.6)	3.4 (1.8-5.3)	2.7 (1.4-4.3)	2.2 (1.2-3.4)	1.8 (0.9-2.7)	1.4 (0.8-2.2)	1.2 (0.6-1.8)	1.0 (0.6-1.5)	0.9 (0.5-1.3)	0.7 (0.4-1.1)	0.6 (0.4-0.9)	
4	6.4 (3.0-9.0)	5.2 (2.4-7.3)	4.1 (2.0-5.9)	3.3 (1.6-4.7)	2.7 (1.3-3.8)	2.2 (1.1-3.0)	1.8 (0.9-2.5)	1.5 (0.8-2.1)	1.2 (0.6-1.7)	1.1 (0.6-1.5)	0.9 (0.5-1.2)	
5	9.5 (4.2-12)	7.7 (3.4-9.5)	6.2 (2.8-7.7)	5.0 (2.2-6.3)	4.0 (1.8-5.1)	3.2 (1.5-4.1)	2.6 (1.2-3.3)	2.2 (1.1-2.8)	1.8 (0.9-2.4)	1.5 (0.8-2.0)	1.3 (0.7-1.7)	
6	14	11	9.1	7.3	5.9	4.7	3.8	3.2	2.6	2.2	1.8	

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	1.0	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2	
1	1.5 (1.0-2.8)	1.3 (0.8-2.3)	1.1 (0.7-1.9)	0.9 (0.6-1.6)	0.8 (0.5-1.3)	0.6 (0.4-1.1)	0.6 (0.4-1.0)	0.5 (0.3-0.8)	0.4 (0.3-0.7)	0.4 (0.2-0.6)	0.3 (0.2-0.5)	
2	2.3 (1.3-4.0)	2.0 (1.1-3.3)	1.6 (0.9-2.8)	1.4 (0.8-2.3)	1.1 (0.7-1.9)	1.0 (0.6-1.6)	0.8 (0.5-1.4)	0.7 (0.4-1.2)	0.6 (0.4-1.0)	0.6 (0.3-0.9)	0.5 (0.3-0.8)	
3	3.6 (1.9-5.5)	3.0 (1.5-4.6)	2.5 (1.3-3.8)	2.1 (1.1-3.2)	1.7 (0.9-2.7)	1.4 (0.8-2.2)	1.2 (0.7-1.9)	1.1 (0.6-1.6)	0.9 (0.5-1.4)	0.8 (0.4-1.2)	0.7 (0.4-1.1)	
4	5.3 (2.5-7.5)	4.5 (2.1-6.3)	3.7 (1.8-5.3)	3.1 (1.5-4.4)	2.6 (1.3-3.7)	2.2 (1.1-3.0)	1.8 (0.9-2.6)	1.6 (0.8-2.2)	1.4 (0.7-1.9)	1.2 (0.6-1.7)	1.0 (0.5-1.4)	
5	7.9 (3.6-9.9)	6.6 (3.0-8.3)	5.5 (2.5-7.0)	4.6 (2.1-5.8)	3.8 (1.8-4.9)	3.2 (1.5-4.1)	2.7 (1.3-3.5)	2.4 (1.1-3.0)	2.0 (1.0-2.6)	1.8 (0.9-2.3)	1.5 (0.8-2.0)	
6	11	9.7	8.1	6.8	5.7	4.7	4.0	3.5	3.0	2.6	2.2	