



Tunisia - 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 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	2.1	1.1	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0
1	3.3 (2.2-4.4)	1.7 (1.1-2.2)	0.9 (0.6-1.2)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	5.3 (3.1-8.0)	2.7 (1.6-4.1)	1.4 (0.8-2.1)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
3	8.2 (4.6-13)	4.3 (2.4-7.0)	2.2 (1.2-3.6)	1.1 (0.6-1.9)	0.6 (0.3-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
4	13 (7.9-19)	6.7 (4.1-10)	3.5 (2.1-5.5)	1.8 (1.1-2.9)	0.9 (0.6-1.5)	0.5 (0.3-0.8)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
5	19 (14-26)	10 (7.5-15)	5.3 (3.9-7.7)	2.8 (2.0-4.0)	1.4 (1.0-2.1)	0.7 (0.5-1.1)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
6	28	15	8.1	4.2	2.2	1.1	0.6	0.3	0.2	0.1	0.0

Ten year probability of hip 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	2.1	1.1	0.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0
1	3.3 (2.2-4.1)	1.8 (1.2-2.2)	1.0 (0.6-1.2)	0.5 (0.3-0.6)	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)	0.0 (0.0-0.0)
2	5.1 (3.1-7.4)	2.8 (1.7-4.1)	1.5 (0.9-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.6)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
3	7.9 (4.7-12)	4.3 (2.6-6.8)	2.4 (1.4-3.7)	1.3 (0.8-2.0)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
4	12 (7.9-18)	6.6 (4.3-10)	3.6 (2.4-5.6)	2.0 (1.3-3.1)	1.1 (0.7-1.7)	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 (0.0-0.1)
5	18 (14-24)	9.9 (7.8-14)	5.5 (4.3-7.9)	3.0 (2.3-4.3)	1.6 (1.3-2.4)	0.9 (0.7-1.3)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
6	25	15	8.2	4.5	2.5	1.3	0.7	0.4	0.2	0.1	0.1

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	2.3	1.3	0.7	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0
1	3.5 (2.4-4.2)	2.0 (1.4-2.4)	1.1 (0.8-1.3)	0.6 (0.4-0.7)	0.4 (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)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	5.4 (3.4-7.3)	3.1 (1.9-4.2)	1.7 (1.1-2.4)	1.0 (0.6-1.3)	0.5 (0.3-0.8)	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 (0.0-0.1)	0.0 (0.0-0.0)
3	8.0 (5.2-12)	4.6 (2.9-6.7)	2.6 (1.7-3.8)	1.5 (0.9-2.2)	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)	0.0 (0.0-0.1)
4	12 (8.4-17)	6.9 (4.8-10)	3.9 (2.7-5.8)	2.2 (1.5-3.3)	1.3 (0.9-1.9)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
5	17 (14-23)	10 (8.3-14)	5.8 (4.8-8.1)	3.3 (2.7-4.7)	1.9 (1.5-2.7)	1.1 (0.9-1.5)	0.6 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
6	24	15	8.5	4.9	2.8	1.6	0.9	0.5	0.3	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 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	2.4	1.4	0.8	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0
1	3.6 (2.5-4.1)	2.1 (1.5-2.4)	1.2 (0.9-1.4)	0.7 (0.5-0.8)	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)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	5.2 (3.6-6.7)	3.1 (2.1-4.0)	1.8 (1.2-2.4)	1.1 (0.7-1.4)	0.6 (0.4-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
3	7.5 (5.4-10)	4.5 (3.2-6.1)	2.7 (1.9-3.6)	1.6 (1.1-2.2)	0.9 (0.7-1.3)	0.6 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
4	11 (8.2-15)	6.6 (5.0-9.0)	3.9 (3.0-5.5)	2.3 (1.8-3.3)	1.4 (1.0-2.0)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
5	15 (13-20)	9.3 (8.1-13)	5.7 (4.9-7.7)	3.4 (2.9-4.6)	2.0 (1.7-2.8)	1.2 (1.0-1.6)	0.7 (0.6-1.0)	0.4 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
6	21	13	8.1	4.9	2.9	1.7	1.1	0.7	0.4	0.2	0.2

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	2.1	1.3	0.8	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0
1	3.4 (3.0-4.5)	2.1 (1.9-2.8)	1.3 (1.2-1.8)	0.8 (0.7-1.1)	0.5 (0.4-0.7)	0.3 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.1-0.1)	0.0 (0.0-0.0)
2	5.4 (4.4-7.1)	3.4 (2.7-4.5)	2.1 (1.7-2.8)	1.3 (1.1-1.8)	0.8 (0.7-1.1)	0.5 (0.4-0.7)	0.3 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
3	8.4 (6.5-11)	5.4 (4.1-6.8)	3.4 (2.6-4.3)	2.1 (1.6-2.7)	1.3 (1.0-1.7)	0.8 (0.6-1.1)	0.5 (0.4-0.7)	0.3 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
4	13 (9.8-16)	8.3 (6.3-10)	5.3 (4.0-6.5)	3.3 (2.5-4.1)	2.1 (1.6-2.6)	1.3 (1.0-1.6)	0.9 (0.6-1.0)	0.5 (0.4-0.7)	0.4 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
5	19 (15-21)	13 (9.5-14)	8.2 (6.1-9.0)	5.2 (3.9-5.8)	3.3 (2.5-3.7)	2.1 (1.6-2.3)	1.4 (1.0-1.5)	0.9 (0.7-1.0)	0.6 (0.4-0.6)	0.4 (0.3-0.4)	0.2 (0.2-0.3)
6	27	19	12	8.1	5.1	3.3	2.2	1.4	0.9	0.6	0.4

Ten year probability of hip 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	1.8	1.2	0.8	0.5	0.3	0.2	0.2	0.1	0.1	0.0	0.0
1	3.4 (2.4-7.4)	2.2 (1.6-5.0)	1.5 (1.0-3.3)	1.0 (0.7-2.2)	0.6 (0.5-1.4)	0.4 (0.3-0.9)	0.3 (0.2-0.6)	0.2 (0.1-0.4)	0.1 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
2	5.9 (3.4-11)	4.0 (2.2-7.4)	2.6 (1.5-4.9)	1.7 (1.0-3.3)	1.1 (0.6-2.2)	0.8 (0.4-1.5)	0.5 (0.3-1.0)	0.4 (0.2-0.7)	0.2 (0.1-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	9.8 (4.8-16)	6.7 (3.2-11)	4.5 (2.1-7.3)	3.0 (1.4-4.9)	2.0 (0.9-3.3)	1.3 (0.6-2.2)	0.9 (0.4-1.5)	0.6 (0.3-1.0)	0.4 (0.2-0.7)	0.3 (0.1-0.5)	0.2 (0.1-0.3)
4	15 (6.8-21)	11 (4.6-15)	7.3 (3.1-10)	4.9 (2.0-6.9)	3.3 (1.4-4.6)	2.3 (0.9-3.1)	1.5 (0.6-2.2)	1.1 (0.4-1.5)	0.7 (0.3-1.0)	0.5 (0.2-0.7)	0.3 (0.1-0.5)
5	23 (10-27)	16 (6.8-20)	12 (4.6-14)	7.9 (3.1-9.5)	5.3 (2.1-6.4)	3.7 (1.4-4.4)	2.5 (1.0-3.0)	1.7 (0.7-2.1)	1.2 (0.5-1.4)	0.8 (0.3-1.0)	0.5 (0.2-0.6)
6	32	24	17	12	8.4	5.9	4.1	2.8	1.9	1.3	0.9

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	1.5	1.1	0.7	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.0
1	2.9 (2.0-6.4)	2.0 (1.4-4.5)	1.4 (1.0-3.1)	1.0 (0.7-2.2)	0.7 (0.5-1.5)	0.5 (0.3-1.1)	0.3 (0.2-0.8)	0.2 (0.2-0.6)	0.2 (0.1-0.4)	0.1 (0.1-0.3)	0.1 (0.1-0.2)
2	4.9 (2.6-9.5)	3.5 (1.8-6.7)	2.4 (1.3-4.7)	1.7 (0.9-3.3)	1.2 (0.6-2.3)	0.8 (0.4-1.7)	0.6 (0.3-1.2)	0.4 (0.2-0.8)	0.3 (0.2-0.6)	0.2 (0.1-0.4)	0.2 (0.1-0.3)
3	8.0 (3.7-13)	5.7 (2.6-9.5)	4.0 (1.8-6.7)	2.8 (1.2-4.7)	2.0 (0.9-3.4)	1.4 (0.6-2.4)	1.0 (0.5-1.8)	0.7 (0.3-1.3)	0.5 (0.2-0.9)	0.4 (0.2-0.6)	0.3 (0.1-0.5)
4	12 (5.2-18)	9.0 (3.6-13)	6.4 (2.5-9.3)	4.5 (1.8-6.6)	3.2 (1.3-4.7)	2.3 (0.9-3.4)	1.7 (0.7-2.5)	1.2 (0.5-1.8)	0.9 (0.3-1.3)	0.6 (0.2-0.9)	0.4 (0.2-0.7)
5	18 (7.7-22)	14 (5.4-16)	9.9 (3.8-12)	7.1 (2.7-8.6)	5.1 (1.9-6.1)	3.7 (1.4-4.5)	2.7 (1.0-3.2)	1.9 (0.7-2.3)	1.4 (0.5-1.7)	1.0 (0.4-1.2)	0.7 (0.3-0.9)
6	26	20	15	11	7.8	5.7	4.2	3.0	2.2	1.6	1.1

Ten year probability of hip 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	1.3	1.0	0.7	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1
1	2.5 (1.7-5.6)	1.8 (1.2-4.1)	1.3 (0.9-3.0)	1.0 (0.7-2.2)	0.7 (0.5-1.6)	0.5 (0.4-1.2)	0.4 (0.3-0.9)	0.3 (0.2-0.7)	0.2 (0.2-0.5)	0.2 (0.1-0.4)	0.1 (0.1-0.3)
2	4.2 (2.2-8.2)	3.1 (1.6-6.1)	2.3 (1.2-4.5)	1.7 (0.9-3.3)	1.2 (0.6-2.5)	0.9 (0.5-1.9)	0.7 (0.4-1.4)	0.5 (0.3-1.1)	0.4 (0.2-0.8)	0.3 (0.2-0.6)	0.2 (0.1-0.5)
3	6.8 (3.1-11)	5.1 (2.3-8.4)	3.7 (1.7-6.3)	2.7 (1.2-4.6)	2.1 (0.9-3.5)	1.6 (0.7-2.7)	1.2 (0.5-2.0)	0.9 (0.4-1.5)	0.7 (0.3-1.2)	0.5 (0.2-0.9)	0.4 (0.2-0.7)
4	11 (4.3-15)	8.0 (3.2-12)	5.9 (2.3-8.7)	4.4 (1.7-6.4)	3.3 (1.3-4.9)	2.6 (1.0-3.8)	1.9 (0.7-2.9)	1.5 (0.6-2.2)	1.1 (0.4-1.7)	0.8 (0.3-1.2)	0.6 (0.2-0.9)
5	16 (6.5-19)	12 (4.8-15)	9.1 (3.5-11)	6.8 (2.6-8.3)	5.2 (2.0-6.4)	4.0 (1.5-4.9)	3.1 (1.1-3.7)	2.3 (0.9-2.9)	1.8 (0.6-2.2)	1.3 (0.5-1.6)	1.0 (0.4-1.2)
6	23	18	14	10	8.0	6.2	4.7	3.6	2.8	2.1	1.6

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	1.2	0.9	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.1	0.1
1	2.2 (1.5-4.9)	1.7 (1.1-3.8)	1.3 (0.9-2.9)	1.0 (0.7-2.3)	0.8 (0.5-1.8)	0.6 (0.4-1.4)	0.5 (0.3-1.1)	0.4 (0.3-0.9)	0.3 (0.2-0.7)	0.2 (0.2-0.6)	0.2 (0.1-0.5)
2	3.7 (1.9-7.3)	2.9 (1.5-5.7)	2.2 (1.1-4.4)	1.7 (0.9-3.4)	1.4 (0.7-2.7)	1.1 (0.6-2.2)	0.9 (0.4-1.7)	0.7 (0.4-1.4)	0.5 (0.3-1.1)	0.4 (0.2-0.9)	0.3 (0.2-0.7)
3	6.0 (2.7-10)	4.7 (2.1-7.8)	3.6 (1.6-6.1)	2.8 (1.2-4.8)	2.3 (1.0-3.8)	1.8 (0.8-3.1)	1.4 (0.6-2.5)	1.2 (0.5-2.0)	0.9 (0.4-1.6)	0.7 (0.3-1.2)	0.6 (0.3-1.0)
4	9.4 (3.8-14)	7.4 (2.9-11)	5.8 (2.3-8.4)	4.5 (1.8-6.6)	3.6 (1.4-5.3)	2.9 (1.1-4.3)	2.3 (0.9-3.4)	1.9 (0.7-2.8)	1.5 (0.6-2.2)	1.2 (0.5-1.8)	0.9 (0.4-1.4)
5	14 (5.7-17)	11 (4.4-14)	8.9 (3.4-11)	7.0 (2.7-8.5)	5.7 (2.1-6.9)	4.6 (1.7-5.6)	3.7 (1.4-4.5)	2.9 (1.1-3.6)	2.3 (0.9-2.9)	1.9 (0.7-2.3)	1.5 (0.5-1.8)
6	21	17	13	11	8.6	7.0	5.6	4.5	3.6	2.9	2.3