Tunisia - The probabilities of a hip fracture in women

The following tables give the 10-year probability (%) of a hip fracture according to body mass index (BMI kg/m2), 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.

Age = 50 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
1	0.2 (0.2-0.5)	0.1 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.1)
2	0.5 (0.2-1.0)	0.3 (0.1-0.6)	0.1 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.2)	0.1 (0.0-0.1)	0.1 (0.0-0.1)
3	0.9 (0.4-1.8)	0.5 (0.2-1.0)	0.3 (0.1-0.5)	0.2 (0.1-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.3)	0.1 (0.0-0.2)
4	1.7 (0.6-2.7)	0.9 (0.4-1.5)	0.5 (0.2-0.8)	0.4 (0.2-0.6)	0.3 (0.1-0.5)	0.2 (0.1-0.4)	0.2 (0.1-0.3)
5	3.0 (1.3-4.0)	1.7 (0.7-2.2)	0.9 (0.4-1.2)	0.7 (0.3-1.0)	0.5 (0.2-0.7)	0.4 (0.2-0.6)	0.3 (0.2-0.4)
6	5.2	2.9	1.6	1.2	1.0	0.8	0.6

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

Age = 55 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	0.2	0.1	0.1	0.1	0.0	0.0	0.0
1	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
2	0.8 (0.4-1.5)	0.4 (0.2-0.8)	0.2 (0.1-0.5)	0.2 (0.1-0.4)	0.1 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.2)
3	1.4 (0.6-2.6)	0.8 (0.4-1.5)	0.4 (0.2-0.8)	0.3 (0.2-0.6)	0.3 (0.1-0.5)	0.2 (0.1-0.4)	0.2 (0.1-0.3)
4	2.5 (1.1-3.9)	1.4 (0.6-2.2)	0.8 (0.3-1.2)	0.6 (0.3-1.0)	0.5 (0.2-0.8)	0.4 (0.2-0.6)	0.3 (0.1-0.5)
5	4.3 (2.2-5.6)	2.5 (1.3-3.3)	1.4 (0.7-1.8)	1.1 (0.6-1.4)	0.8 (0.4-1.1)	0.6 (0.3-0.9)	0.5 (0.3-0.7)
6	7.3	4.3	2.4	1.9	1.5	1.1	0.9

Age = 60 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	0.4	0.2	0.1	0.1	0.1	0.1	0.0
1	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
2	1.2 (0.7-2.1)	0.7 (0.4-1.3)	0.4 (0.2-0.7)	0.3 (0.2-0.6)	0.2 (0.1-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.3)
3	2.1 (1.1-3.7)	1.3 (0.6-2.3)	0.7 (0.4-1.3)	0.6 (0.3-1.0)	0.4 (0.2-0.8)	0.3 (0.2-0.6)	0.3 (0.1-0.5)
4	3.6 (1.9-5.6)	2.2 (1.1-3.4)	1.3 (0.6-2.0)	1.0 (0.5-1.5)	0.8 (0.4-1.2)	0.6 (0.3-0.9)	0.5 (0.2-0.7)
5	6.0 (3.6-7.7)	3.7 (2.2-4.8)	2.2 (1.3-2.9)	1.7 (1.0-2.2)	1.3 (0.8-1.7)	1.0 (0.6-1.3)	0.8 (0.5-1.0)
6	9.9	6.3	3.8	2.9	2.2	1.7	1.3

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

Age = 65 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	0.6	0.4	0.2	0.2	0.1	0.1	0.1
1	1.0 (0.8-1.5)	0.6 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.2-0.3)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
2	1.7 (1.0-2.6)	1.1 (0.7-1.7)	0.7 (0.4-1.1)	0.5 (0.3-0.8)	0.4 (0.2-0.6)	0.3 (0.2-0.5)	0.2 (0.1-0.4)
3	2.8 (1.6-4.5)	1.8 (1.0-3.0)	1.1 (0.6-1.9)	0.9 (0.5-1.5)	0.7 (0.4-1.1)	0.5 (0.3-0.9)	0.4 (0.2-0.7)
4	4.5 (2.7-6.8)	3.0 (1.8-4.6)	1.9 (1.1-2.9)	1.5 (0.9-2.2)	1.1 (0.7-1.7)	0.9 (0.5-1.3)	0.7 (0.4-1.0)
5	7.1 (4.7-8.8)	4.9 (3.3-6.1)	3.2 (2.1-4.0)	2.4 (1.6-3.1)	1.9 (1.2-2.3)	1.4 (1.0-1.8)	1.1 (0.7-1.4)
6	11	7.9	5.2	4.0	3.1	2.4	1.8

Age = 70 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	0.7	0.5	0.3	0.3	0.2	0.2	0.1
1	1.3 (0.9-1.6)	0.9 (0.7-1.1)	0.6 (0.5-0.7)	0.5 (0.3-0.6)	0.4 (0.3-0.4)	0.3 (0.2-0.3)	0.2 (0.2-0.2)
2	2.2 (1.4-3.3)	1.6 (1.0-2.3)	1.1 (0.7-1.5)	0.8 (0.5-1.2)	0.6 (0.4-0.9)	0.5 (0.3-0.7)	0.4 (0.2-0.5)
3	3.7 (2.2-5.7)	2.7 (1.7-4.1)	1.9 (1.2-2.8)	1.4 (0.9-2.1)	1.1 (0.7-1.6)	0.8 (0.5-1.2)	0.6 (0.4-0.9)
4	6.1 (3.8-8.9)	4.6 (2.9-6.8)	3.3 (2.1-4.8)	2.5 (1.6-3.7)	1.9 (1.2-2.8)	1.4 (0.9-2.1)	1.1 (0.7-1.6)
5	9.8 (7.7-13)	7.6 (6.1-10)	5.5 (4.5-7.2)	4.2 (3.4-5.6)	3.2 (2.6-4.3)	2.5 (2.0-3.2)	1.9 (1.5-2.5)
6	15	12	9.2	7.1	5.4	4.1	3.1

FRAX ® WHO Fracture Risk Assessment Tool

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

Age = 75 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	0.8	0.6	0.5	0.4	0.3	0.2	0.2
1	1.5 (1.0-2.8)	1.2 (0.8-2.2)	0.9 (0.6-1.6)	0.7 (0.4-1.2)	0.5 (0.3-0.9)	0.4 (0.3-0.7)	0.3 (0.2-0.5)
2	2.7 (1.4-5.0)	2.2 (1.2-4.0)	1.6 (0.9-2.9)	1.2 (0.7-2.2)	0.9 (0.5-1.7)	0.7 (0.4-1.3)	0.5 (0.3-1.0)
3	4.7 (2.1-8.6)	3.9 (1.8-6.8)	3.0 (1.4-5.1)	2.2 (1.1-3.9)	1.7 (0.8-2.9)	1.3 (0.6-2.2)	1.0 (0.4-1.7)
4	7.9 (3.7-13)	6.6 (3.1-10)	5.2 (2.5-8.2)	3.9 (1.9-6.2)	3.0 (1.4-4.7)	2.2 (1.1-3.6)	1.7 (0.8-2.7)
5	13 (6.6-17)	11 (5.5-15)	8.7 (4.5-12)	6.7 (3.4-9.3)	5.1 (2.5-7.1)	3.8 (1.9-5.4)	2.9 (1.4-4.1)
6	20	17	14	11	8.4	6.4	4.8

Age = 80 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	1.0	0.8	0.6	0.5	0.3	0.3	0.2
1	1.7 (1.1-3.3)	1.4 (0.9-2.7)	1.1 (0.7-2.1)	0.8 (0.6-1.6)	0.6 (0.4-1.2)	0.5 (0.3-0.9)	0.4 (0.2-0.7)
2	3.0 (1.6-5.7)	2.5 (1.4-4.7)	2.0 (1.1-3.7)	1.5 (0.8-2.8)	1.1 (0.6-2.1)	0.8 (0.5-1.6)	0.6 (0.3-1.2)
3	5.0 (2.4-8.5)	4.2 (2.0-7.1)	3.5 (1.7-5.7)	2.6 (1.3-4.3)	2.0 (1.0-3.3)	1.5 (0.7-2.5)	1.1 (0.5-1.9)
4	8.1 (3.8-12)	6.9 (3.2-11)	5.7 (2.6-8.6)	4.3 (2.0-6.5)	3.3 (1.5-4.9)	2.5 (1.1-3.7)	1.8 (0.8-2.8)
5	13 (6.4-17)	11 (5.4-15)	9.2 (4.6-13)	7.0 (3.4-9.6)	5.3 (2.6-7.4)	4.0 (1.9-5.6)	3.0 (1.4-4.2)
6	19	17	14	11	8.5	6.4	4.9

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

Age = 85 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	1.1	0.9	0.8	0.6	0.4	0.3	0.2
1	2.0 (1.3-3.8)	1.7 (1.1-3.2)	1.4 (0.9-2.6)	1.0 (0.7-2.0)	0.8 (0.5-1.5)	0.6 (0.4-1.1)	0.4 (0.3-0.8)
2	3.4 (1.9-6.5)	2.9 (1.6-5.5)	2.4 (1.3-4.5)	1.8 (1.0-3.4)	1.4 (0.7-2.6)	1.0 (0.5-1.9)	0.8 (0.4-1.4)
3	5.7 (2.8-9.7)	4.9 (2.4-8.2)	4.1 (2.0-6.9)	3.1 (1.5-5.2)	2.3 (1.1-3.9)	1.7 (0.8-3.0)	1.3 (0.6-2.2)
4	9.2 (4.3-14)	7.9 (3.6-12)	6.7 (3.0-10)	5.1 (2.3-7.8)	3.8 (1.7-5.9)	2.9 (1.3-4.5)	2.1 (0.9-3.4)
5	14 (7.3-19)	12 (6.2-17)	11 (5.2-14)	8.1 (4.0-11)	6.1 (3.0-8.5)	4.6 (2.2-6.4)	3.5 (1.7-4.9)
6	21	19	16	13	9.6	7.3	5.6

Age = 90 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	1.3	1.1	0.9	0.7	0.5	0.4	0.3
1	2.3 (1.5-4.4)	1.9 (1.2-3.7)	1.6 (1.0-3.1)	1.2 (0.8-2.3)	0.9 (0.6-1.7)	0.7 (0.4-1.3)	0.5 (0.3-1.0)
2	4.0 (2.1-7.4)	3.4 (1.8-6.3)	2.8 (1.5-5.3)	2.1 (1.1-4.0)	1.6 (0.8-3.0)	1.2 (0.6-2.3)	0.9 (0.5-1.7)
3	6.6 (3.2-11)	5.6 (2.7-9.5)	4.7 (2.3-8.1)	3.6 (1.7-6.1)	2.7 (1.3-4.6)	2.0 (1.0-3.5)	1.5 (0.7-2.6)
4	10 (4.9-16)	9.0 (4.2-14)	7.7 (3.5-12)	5.8 (2.6-9.0)	4.4 (2.0-6.9)	3.3 (1.5-5.2)	2.5 (1.1-3.9)
5	16 (8.4-21)	14 (7.1-19)	12 (6.1-16)	9.3 (4.6-13)	7.1 (3.4-9.7)	5.4 (2.6-7.4)	4.0 (1.9-5.6)
6	23	21	18	14	11	8.4	6.4

© World Health Organization Collaborating Centre for Metabolic Bone Diseases, University of Sheffield, UK