

Ecuador - 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 Ecuador. 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	4.8	2.9	1.8	1.2	0.9	0.7	0.6	0.5	0.4	0.4	0.4
1	7.6 (6.0-9.9)	4.5 (3.9-5.9)	2.8 (2.5-3.7)	1.9 (1.6-2.4)	1.3 (1.1-1.7)	1.0 (0.8-1.3)	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)
2	12 (8.2-17)	7.0 (5.2-10)	4.4 (3.4-6.3)	2.9 (2.2-4.1)	2.0 (1.4-2.9)	1.6 (1.0-2.4)	1.2 (0.7-2.0)	1.0 (0.6-1.8)	0.9 (0.5-1.6)	0.9 (0.5-1.5)	0.8 (0.4-1.5)
3	18 (11-25)	11 (7.2-15)	6.6 (4.6-9.0)	4.4 (3.0-6.3)	3.1 (1.9-4.8)	2.3 (1.3-3.9)	1.8 (1.0-3.3)	1.5 (0.8-2.9)	1.4 (0.6-2.6)	1.3 (0.6-2.5)	1.2 (0.6-2.4)
4	26 (17-35)	16 (10-21)	9.9 (6.3-13)	6.5 (4.1-8.4)	4.5 (2.9-6.4)	3.4 (2.2-5.1)	2.7 (1.6-4.3)	2.2 (1.3-3.7)	2.0 (1.1-3.3)	1.8 (1.0-3.2)	1.7 (0.9-3.1)
5	36 (28-45)	23 (17-29)	14 (11-17)	9.5 (7.0-11)	6.6 (4.9-8.0)	4.9 (3.6-6.3)	3.8 (2.8-5.2)	3.2 (2.3-4.4)	2.8 (2.0-4.0)	2.6 (1.8-3.8)	2.5 (1.7-3.6)
6	49	32	21	14	9.4	6.9	5.4	4.4	3.9	3.6	3.4

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

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	4.7	2.9	1.9	1.3	0.9	0.7	0.6	0.5	0.4	0.4	0.4
1	7.2 (5.9-8.9)	4.5 (4.0-5.5)	2.9 (2.6-3.6)	2.0 (1.7-2.4)	1.4 (1.1-1.7)	1.1 (0.8-1.3)	0.9 (0.6-1.1)	0.7 (0.5-1.0)	0.6 (0.4-0.9)	0.6 (0.4-0.8)	0.6 (0.4-0.8)
2	11 (8.1-15)	6.8 (5.3-9.5)	4.4 (3.5-6.1)	3.0 (2.3-4.1)	2.1 (1.5-3.0)	1.6 (1.1-2.4)	1.3 (0.8-2.0)	1.1 (0.6-1.7)	0.9 (0.5-1.6)	0.9 (0.5-1.5)	0.8 (0.4-1.4)
3	16 (11-22)	10 (7.2-14)	6.6 (4.7-8.6)	4.4 (3.2-6.3)	3.2 (2.1-4.9)	2.4 (1.4-3.9)	1.9 (1.0-3.3)	1.5 (0.8-2.8)	1.4 (0.7-2.6)	1.3 (0.6-2.4)	1.2 (0.6-2.3)
4	23 (16-31)	15 (10-19)	9.7 (6.5-12)	6.5 (4.3-8.4)	4.6 (3.1-6.4)	3.5 (2.3-5.2)	2.7 (1.7-4.3)	2.2 (1.3-3.6)	2.0 (1.1-3.3)	1.8 (1.0-3.1)	1.7 (0.9-3.0)
5	33 (26-40)	21 (17-26)	14 (11-16)	9.4 (7.3-11)	6.6 (5.1-8.1)	4.9 (3.8-6.4)	3.9 (3.0-5.2)	3.1 (2.4-4.4)	2.8 (2.0-3.9)	2.6 (1.8-3.7)	2.4 (1.6-3.5)
6	44	30	20	13	9.4	7.0	5.4	4.4	3.9	3.5	3.3

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	4.2	2.8	1.9	1.3	1.0	0.8	0.6	0.5	0.5	0.4	0.4
1	6.4 (5.5-7.5)	4.2 (3.8-4.9)	2.8 (2.5-3.4)	2.0 (1.7-2.4)	1.5 (1.2-1.8)	1.1 (0.9-1.4)	0.9 (0.7-1.2)	0.7 (0.5-1.0)	0.7 (0.5-0.9)	0.6 (0.4-0.9)	0.6 (0.4-0.8)
2	9.4 (7.4-13)	6.2 (4.9-8.3)	4.2 (3.4-5.7)	3.0 (2.3-4.0)	2.2 (1.6-3.0)	1.7 (1.1-2.5)	1.3 (0.8-2.1)	1.1 (0.6-1.7)	1.0 (0.6-1.6)	0.9 (0.5-1.5)	0.8 (0.4-1.4)
3	14 (10-18)	9.1 (6.7-12)	6.2 (4.6-8.2)	4.4 (3.2-6.2)	3.2 (2.2-4.9)	2.4 (1.5-3.9)	1.9 (1.1-3.3)	1.6 (0.9-2.8)	1.4 (0.7-2.6)	1.3 (0.6-2.4)	1.2 (0.6-2.2)
4	20 (14-25)	13 (9.4-16)	9.0 (6.3-11)	6.3 (4.4-8.2)	4.6 (3.2-6.4)	3.5 (2.4-5.2)	2.8 (1.8-4.3)	2.2 (1.4-3.6)	2.0 (1.2-3.3)	1.8 (1.0-3.1)	1.7 (0.9-2.9)
5	27 (23-33)	19 (15-22)	13 (10-14)	9.0 (7.3-11)	6.6 (5.2-8.1)	5.0 (3.9-6.4)	3.9 (3.1-5.2)	3.2 (2.5-4.4)	2.8 (2.1-4.0)	2.5 (1.8-3.7)	2.3 (1.6-3.4)
6	37	26	18	13	9.2	6.9	5.4	4.4	3.9	3.5	3.2

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

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	4.0	2.8	2.0	1.5	1.1	0.9	0.7	0.6	0.5	0.5	0.4
1	5.9 (5.5-6.7)	4.1 (3.7-4.7)	3.0 (2.6-3.4)	2.2 (1.8-2.5)	1.6 (1.3-1.9)	1.3 (1.0-1.6)	1.0 (0.7-1.3)	0.9 (0.6-1.1)	0.8 (0.5-1.0)	0.7 (0.5-1.0)	0.6 (0.4-0.9)
2	8.6 (6.9-11)	6.0 (4.9-7.7)	4.3 (3.5-5.5)	3.2 (2.5-4.1)	2.4 (1.8-3.3)	1.9 (1.3-2.7)	1.5 (1.0-2.2)	1.2 (0.8-1.9)	1.1 (0.6-1.8)	1.0 (0.6-1.6)	0.9 (0.5-1.5)
3	12 (9.4-15)	8.6 (6.6-11)	6.2 (4.8-8.2)	4.6 (3.4-6.4)	3.4 (2.4-5.2)	2.7 (1.7-4.2)	2.1 (1.3-3.5)	1.8 (1.0-3.0)	1.6 (0.9-2.8)	1.4 (0.7-2.6)	1.3 (0.7-2.4)
4	17 (13-21)	12 (9.1-14)	8.8 (6.5-11)	6.5 (4.7-8.5)	4.9 (3.5-6.8)	3.8 (2.7-5.5)	3.0 (2.1-4.6)	2.5 (1.6-4.0)	2.2 (1.4-3.6)	2.0 (1.2-3.3)	1.8 (1.0-3.1)
5	23 (20-27)	17 (14-19)	12 (10-14)	9.0 (7.5-11)	6.8 (5.6-8.5)	5.3 (4.3-6.8)	4.2 (3.4-5.6)	3.5 (2.7-4.8)	3.1 (2.3-4.3)	2.7 (2.0-3.9)	2.5 (1.7-3.6)
6	31	23	17	12	9.3	7.2	5.7	4.7	4.1	3.7	3.4

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	4.3	3.2	2.4	1.8	1.4	1.1	0.9	0.8	0.7	0.6	0.5
1	6.6 (5.6-8.3)	4.8 (4.0-6.0)	3.5 (2.9-4.4)	2.7 (2.1-3.3)	2.0 (1.6-2.5)	1.6 (1.2-1.9)	1.3 (0.9-1.5)	1.1 (0.8-1.3)	0.9 (0.7-1.1)	0.8 (0.6-1.0)	0.7 (0.5-0.9)
2	9.9 (7.7-13)	7.2 (5.5-9.5)	5.3 (4.0-7.0)	3.9 (2.9-5.2)	3.0 (2.2-4.0)	2.3 (1.6-3.1)	1.8 (1.2-2.5)	1.5 (1.0-2.1)	1.3 (0.8-1.8)	1.1 (0.7-1.6)	1.0 (0.6-1.4)
3	15 (11-19)	11 (7.8-14)	7.8 (5.6-11)	5.8 (4.0-8.1)	4.3 (2.9-6.2)	3.3 (2.2-4.9)	2.6 (1.7-3.8)	2.1 (1.3-3.2)	1.8 (1.1-2.8)	1.6 (0.9-2.5)	1.4 (0.8-2.2)
4	21 (16-26)	16 (12-20)	12 (8.6-15)	8.5 (6.3-11)	6.3 (4.6-8.3)	4.8 (3.4-6.5)	3.6 (2.6-5.1)	2.9 (2.1-4.2)	2.5 (1.7-3.7)	2.1 (1.5-3.2)	1.9 (1.3-2.9)
5	30 (24-34)	23 (18-26)	17 (13-19)	12 (9.7-15)	9.2 (7.2-11)	6.8 (5.4-8.4)	5.2 (4.1-6.5)	4.1 (3.3-5.3)	3.4 (2.8-4.6)	2.9 (2.4-4.0)	2.5 (2.1-3.5)
6	41	32	24	18	13	9.8	7.4	5.8	4.8	4.0	3.4

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

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	4.9	3.7	2.9	2.2	1.7	1.4	1.1	1.0	0.8	0.7	0.7
1	8.1 (6.0-15)	6.1 (4.5-11)	4.6 (3.4-7.9)	3.5 (2.5-5.8)	2.7 (1.9-4.3)	2.1 (1.5-3.2)	1.6 (1.2-2.4)	1.4 (1.0-1.9)	1.2 (0.8-1.5)	1.0 (0.7-1.2)	0.9 (0.6-1.0)
2	13 (8.1-21)	9.7 (6.1-16)	7.3 (4.6-12)	5.5 (3.5-9.0)	4.2 (2.6-6.7)	3.2 (2.0-5.0)	2.5 (1.6-3.8)	2.0 (1.3-3.0)	1.7 (1.1-2.4)	1.4 (0.9-2.0)	1.2 (0.8-1.6)
3	20 (11-29)	15 (8.6-22)	11 (6.4-17)	8.6 (4.8-13)	6.5 (3.6-9.6)	4.9 (2.8-7.3)	3.7 (2.1-5.5)	3.0 (1.7-4.4)	2.4 (1.4-3.6)	2.0 (1.2-3.0)	1.7 (1.0-2.5)
4	29 (16-38)	23 (12-30)	18 (9.2-23)	13 (7.0-18)	10 (5.3-13)	7.5 (4.1-10)	5.7 (3.2-7.6)	4.5 (2.6-6.0)	3.6 (2.2-4.8)	2.9 (1.8-4.0)	2.4 (1.6-3.3)
5	40 (23-47)	33 (18-38)	26 (14-30)	20 (10-23)	15 (8.0-18)	11 (6.2-14)	8.6 (4.8-10)	6.7 (3.9-8.1)	5.3 (3.3-6.5)	4.2 (2.8-5.3)	3.4 (2.4-4.3)
6	52	44	36	29	22	17	13	10	7.8	6.2	4.9

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	5.1	4.0	3.2	2.5	2.0	1.6	1.3	1.1	1.0	0.9	0.8
1	8.2 (5.9-15)	6.4 (4.6-12)	5.0 (3.6-8.9)	3.9 (2.8-6.8)	3.1 (2.2-5.3)	2.5 (1.7-4.0)	2.0 (1.4-3.1)	1.7 (1.2-2.5)	1.4 (1.0-2.0)	1.2 (0.8-1.7)	1.0 (0.7-1.4)
2	13 (8.0-21)	10 (6.3-17)	7.8 (4.9-13)	6.1 (3.8-10)	4.8 (3.0-7.9)	3.8 (2.4-6.1)	3.0 (1.9-4.7)	2.5 (1.6-3.8)	2.1 (1.3-3.1)	1.7 (1.1-2.6)	1.5 (0.9-2.1)
3	19 (11-28)	15 (8.5-23)	12 (6.7-18)	9.4 (5.3-14)	7.3 (4.2-11)	5.7 (3.3-8.6)	4.5 (2.6-6.7)	3.7 (2.1-5.4)	3.0 (1.8-4.4)	2.5 (1.5-3.6)	2.1 (1.3-3.0)
4	27 (15-36)	22 (12-29)	18 (9.2-24)	14 (7.3-19)	11 (5.7-15)	8.6 (4.5-12)	6.8 (3.6-9.1)	5.5 (3.0-7.4)	4.5 (2.5-6.0)	3.7 (2.1-4.9)	3.0 (1.8-4.1)
5	36 (20-43)	31 (16-36)	25 (13-30)	20 (10-24)	16 (8.1-19)	13 (6.5-15)	10 (5.2-12)	8.1 (4.4-9.9)	6.6 (3.7-8.1)	5.4 (3.1-6.6)	4.4 (2.7-5.5)
6	47	41	34	28	23	18	15	12	9.6	7.8	6.3

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

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	5.0	4.1	3.3	2.7	2.2	1.8	1.5	1.3	1.2	1.0	0.9
1	7.9 (5.5-15)	6.5 (4.5-12)	5.3 (3.6-9.6)	4.3 (2.9-7.7)	3.5 (2.4-6.2)	2.8 (1.9-4.9)	2.4 (1.6-4.0)	2.0 (1.4-3.3)	1.7 (1.2-2.8)	1.5 (1.0-2.3)	1.3 (0.9-1.9)
2	12 (7.4-20)	9.9 (6.1-17)	8.1 (4.9-14)	6.6 (4.0-11)	5.4 (3.3-8.8)	4.3 (2.6-7.1)	3.6 (2.2-5.8)	3.0 (1.9-4.8)	2.6 (1.6-4.0)	2.2 (1.4-3.4)	1.9 (1.2-2.8)
3	18 (10-26)	15 (8.2-22)	12 (6.7-18)	9.9 (5.5-15)	8.1 (4.5-12)	6.6 (3.6-10)	5.4 (3.0-8.2)	4.5 (2.6-6.8)	3.8 (2.2-5.7)	3.2 (1.8-4.8)	2.7 (1.6-4.0)
4	25 (13-33)	21 (11-28)	18 (9.1-24)	15 (7.5-20)	12 (6.1-16)	9.8 (5.0-13)	8.1 (4.2-11)	6.8 (3.6-9.3)	5.7 (3.0-7.8)	4.8 (2.6-6.5)	4.0 (2.2-5.4)
5	34 (18-40)	29 (15-35)	25 (12-30)	21 (10-25)	17 (8.4-21)	14 (6.9-17)	12 (5.8-15)	9.9 (4.9-12)	8.3 (4.2-10)	7.0 (3.6-8.8)	5.9 (3.1-7.4)
6	44	39	33	29	24	20	17	14	12	10	8.5

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	4.9	4.1	3.5	2.9	2.5	2.1	1.8	1.6	1.4	1.3	1.1
1	7.6 (5.2-14)	6.4 (4.3-12)	5.4 (3.6-9.7)	4.5 (3.0-8.1)	3.8 (2.5-6.8)	3.2 (2.1-5.7)	2.8 (1.8-4.8)	2.4 (1.6-4.2)	2.1 (1.4-3.6)	1.9 (1.2-3.1)	1.6 (1.1-2.7)
2	11 (7.0-19)	9.7 (5.9-16)	8.2 (4.9-14)	6.9 (4.1-11)	5.8 (3.5-9.6)	4.9 (2.9-8.0)	4.2 (2.5-6.9)	3.6 (2.2-5.9)	3.2 (1.9-5.1)	2.8 (1.7-4.4)	2.4 (1.5-3.8)
3	17 (9.3-25)	14 (7.9-21)	12 (6.7-18)	10 (5.6-16)	8.7 (4.7-13)	7.3 (4.0-11)	6.3 (3.4-9.6)	5.5 (3.0-8.3)	4.8 (2.6-7.2)	4.1 (2.3-6.2)	3.6 (2.0-5.4)
4	23 (12-31)	20 (11-27)	18 (9.0-24)	15 (7.6-21)	13 (6.4-18)	11 (5.4-15)	9.3 (4.7-13)	8.1 (4.1-11)	7.0 (3.6-9.8)	6.1 (3.2-8.5)	5.3 (2.8-7.3)
5	32 (17-38)	28 (14-34)	25 (12-29)	21 (10-26)	18 (8.9-22)	16 (7.5-19)	14 (6.5-17)	12 (5.7-15)	10 (5.0-13)	9.0 (4.3-11)	7.8 (3.8-9.7)
6	42	38	33	29	26	22	19	17	15	13	11