

Ecuador - 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 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	3.9	2.4	1.6	1.1	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.5
1	6.1 (5.1-7.9)	3.7 (3.3-4.8)	2.4 (2.1-3.1)	1.7 (1.4-2.2)	1.3 (1.0-1.6)	1.0 (0.7-1.4)	0.9 (0.6-1.2)	0.8 (0.5-1.1)	0.7 (0.5-1.0)	0.7 (0.5-1.0)	0.7 (0.5-1.0)	0.7 (0.4-1.0)
2	9.5 (6.9-14)	5.8 (4.5-8.4)	3.7 (2.8-5.4)	2.6 (1.8-3.7)	2.0 (1.3-3.0)	1.6 (0.9-2.5)	1.3 (0.7-2.2)	1.2 (0.6-2.0)	1.1 (0.6-1.9)	1.0 (0.5-1.8)	1.0 (0.5-1.8)	1.0 (0.5-1.8)
3	14 (9.5-21)	8.8 (6.1-12)	5.7 (4.0-8.2)	3.9 (2.5-6.2)	2.9 (1.7-5.0)	2.3 (1.2-4.2)	1.9 (1.0-3.6)	1.7 (0.8-3.3)	1.6 (0.7-3.1)	1.5 (0.7-3.0)	1.5 (0.7-3.0)	1.5 (0.7-2.9)
4	21 (14-29)	13 (8.4-17)	8.5 (5.4-11)	5.8 (3.7-8.1)	4.3 (2.8-6.5)	3.4 (2.1-5.4)	2.8 (1.6-4.6)	2.5 (1.3-4.2)	2.3 (1.2-4.0)	2.2 (1.1-3.9)	2.2 (1.1-3.9)	2.1 (1.1-3.7)
5	31 (24-38)	19 (14-23)	12 (9.3-14)	8.5 (6.3-10)	6.2 (4.7-8.0)	4.9 (3.6-6.5)	4.0 (3.0-5.5)	3.5 (2.6-5.0)	3.3 (2.3-4.7)	3.1 (2.1-4.5)	3.1 (2.1-4.5)	3.0 (2.0-4.4)
6	43	28	18	12	8.9	6.9	5.6	5.0	4.6	4.4	4.4	4.2

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	3.9	2.5	1.7	1.2	1.0	0.8	0.6	0.6	0.5	0.5	0.5
1	6.0 (5.3-7.3)	3.9 (3.4-4.7)	2.6 (2.2-3.2)	1.9 (1.5-2.3)	1.4 (1.1-1.8)	1.2 (0.8-1.5)	1.0 (0.7-1.3)	0.9 (0.6-1.2)	0.8 (0.5-1.1)	0.8 (0.5-1.1)	0.7 (0.5-1.0)
2	9.1 (7.1-13)	5.9 (4.7-8.2)	4.0 (3.0-5.5)	2.9 (2.0-4.0)	2.2 (1.4-3.3)	1.7 (1.0-2.7)	1.4 (0.8-2.3)	1.3 (0.7-2.2)	1.2 (0.6-2.0)	1.1 (0.6-1.9)	1.1 (0.5-1.8)
3	14 (9.7-19)	8.8 (6.4-12)	6.0 (4.2-8.6)	4.3 (2.8-6.6)	3.2 (1.9-5.4)	2.5 (1.4-4.5)	2.1 (1.1-3.8)	1.9 (0.9-3.5)	1.7 (0.8-3.3)	1.6 (0.8-3.1)	1.5 (0.7-3.0)
4	20 (14-26)	13 (8.7-16)	8.8 (5.8-11)	6.2 (4.1-8.7)	4.7 (3.1-7.0)	3.7 (2.3-5.8)	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 (1.2-3.8)
5	29 (23-35)	19 (15-22)	13 (10-14)	9.0 (7.0-11)	6.7 (5.2-8.6)	5.3 (4.1-7.0)	4.3 (3.3-5.9)	3.8 (2.8-5.4)	3.5 (2.5-5.1)	3.3 (2.3-4.8)	3.1 (2.1-4.5)
6	39	27	18	13	9.5	7.4	6.0	5.4	4.9	4.6	4.3

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	4.0	2.7	1.9	1.4	1.1	0.9	0.7	0.7	0.6	0.6	0.5
1	6.2 (5.5-7.2)	4.1 (3.7-4.8)	2.9 (2.4-3.4)	2.1 (1.7-2.5)	1.6 (1.2-2.0)	1.3 (0.9-1.7)	1.1 (0.7-1.5)	1.0 (0.7-1.3)	0.9 (0.6-1.2)	0.8 (0.5-1.2)	0.8 (0.5-1.1)
2	9.2 (7.4-12)	6.2 (5.0-8.3)	4.3 (3.3-5.7)	3.1 (2.2-4.3)	2.4 (1.6-3.5)	1.9 (1.2-2.9)	1.6 (0.9-2.6)	1.4 (0.8-2.3)	1.3 (0.7-2.2)	1.2 (0.6-2.0)	1.1 (0.6-1.9)
3	14 (10-18)	9.1 (6.8-12)	6.3 (4.6-9.1)	4.6 (3.1-7.1)	3.5 (2.1-5.7)	2.8 (1.6-4.8)	2.3 (1.2-4.1)	2.1 (1.0-3.8)	1.9 (0.9-3.5)	1.7 (0.8-3.3)	1.6 (0.8-3.1)
4	20 (14-25)	13 (9.2-16)	9.2 (6.4-12)	6.7 (4.6-9.3)	5.0 (3.5-7.5)	4.0 (2.6-6.2)	3.3 (2.0-5.3)	3.0 (1.7-4.9)	2.7 (1.5-4.5)	2.5 (1.4-4.2)	2.3 (1.2-4.0)
5	28 (23-33)	19 (16-21)	13 (11-15)	9.5 (7.7-12)	7.2 (5.8-9.1)	5.6 (4.5-7.5)	4.7 (3.6-6.4)	4.2 (3.0-5.8)	3.8 (2.7-5.4)	3.5 (2.4-5.0)	3.2 (2.2-4.7)
6	38	26	18	13	10	7.8	6.5	5.8	5.2	4.8	4.5

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	4.5	3.2	2.3	1.7	1.3	1.0	0.9	0.8	0.7	0.7	0.6
1	6.8 (6.2-7.8)	4.7 (4.1-5.4)	3.4 (2.8-3.8)	2.5 (2.0-3.0)	1.9 (1.5-2.5)	1.5 (1.1-2.0)	1.3 (0.9-1.8)	1.2 (0.8-1.6)	1.1 (0.7-1.5)	1.0 (0.6-1.4)	0.9 (0.6-1.3)
2	10 (8.3-13)	6.9 (5.7-8.9)	5.0 (3.8-6.4)	3.7 (2.7-5.1)	2.9 (1.9-4.2)	2.3 (1.4-3.4)	2.0 (1.2-3.1)	1.7 (1.0-2.8)	1.6 (0.9-2.6)	1.4 (0.8-2.4)	1.3 (0.7-2.2)
3	14 (11-18)	10 (7.8-14)	7.2 (5.3-10)	5.4 (3.6-8.3)	4.1 (2.6-6.7)	3.3 (1.9-5.5)	2.8 (1.5-4.9)	2.5 (1.3-4.5)	2.2 (1.1-4.1)	2.0 (1.0-3.8)	1.9 (0.9-3.5)
4	20 (15-24)	14 (10-18)	10 (7.5-14)	7.7 (5.5-11)	5.9 (4.2-8.7)	4.6 (3.2-7.2)	4.0 (2.5-6.4)	3.5 (2.1-5.8)	3.2 (1.8-5.3)	2.9 (1.6-4.9)	2.7 (1.5-4.5)
5	28 (24-32)	20 (17-22)	15 (12-17)	11 (9.1-13)	8.3 (6.9-11)	6.5 (5.3-8.6)	5.6 (4.3-7.6)	4.9 (3.6-6.9)	4.4 (3.1-6.3)	4.0 (2.8-5.8)	3.7 (2.5-5.3)
6	38	27	20	15	11	9.0	7.7	6.8	6.1	5.5	5.1

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	5.8	4.2	3.1	2.3	1.8	1.5	1.3	1.1	1.0	0.9	0.8
1	8.8 (7.6-11)	6.2 (5.3-7.5)	4.5 (3.7-5.4)	3.4 (2.7-4.0)	2.6 (2.0-3.0)	2.1 (1.5-2.4)	1.8 (1.3-2.1)	1.5 (1.1-1.8)	1.4 (1.0-1.6)	1.2 (0.9-1.5)	1.1 (0.8-1.3)
2	13 (10-18)	9.3 (7.2-12)	6.7 (5.0-9.0)	4.9 (3.6-6.6)	3.7 (2.6-5.0)	2.9 (2.0-3.9)	2.5 (1.6-3.3)	2.1 (1.4-2.9)	1.9 (1.2-2.6)	1.7 (1.0-2.3)	1.5 (0.9-2.1)
3	20 (14-26)	14 (9.9-19)	9.9 (6.8-14)	7.2 (4.8-10)	5.3 (3.5-7.9)	4.2 (2.6-6.3)	3.5 (2.1-5.4)	3.0 (1.8-4.7)	2.6 (1.5-4.1)	2.3 (1.3-3.7)	2.0 (1.2-3.3)
4	29 (22-34)	20 (15-25)	15 (11-18)	11 (7.6-14)	7.7 (5.5-10)	5.9 (4.2-8.3)	4.9 (3.5-7.0)	4.1 (2.9-6.1)	3.5 (2.5-5.3)	3.1 (2.1-4.8)	2.8 (1.9-4.3)
5	41 (34-44)	30 (24-33)	21 (17-24)	15 (12-18)	11 (9.0-13)	8.4 (6.9-10)	6.8 (5.6-8.7)	5.7 (4.7-7.4)	4.8 (4.0-6.4)	4.2 (3.5-5.7)	3.7 (3.0-5.1)
6	55	41	30	22	16	12	9.5	7.8	6.6	5.7	5.0

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	7.5	5.5	4.1	3.1	2.4	2.0	1.7	1.5	1.3	1.1	1.0
1	12 (9.6-20)	8.8 (6.8-14)	6.4 (4.9-9.8)	4.7 (3.6-6.9)	3.5 (2.7-4.9)	2.9 (2.1-3.7)	2.4 (1.8-2.9)	2.0 (1.5-2.3)	1.7 (1.3-2.0)	1.5 (1.1-1.8)	1.3 (1.0-1.6)
2	19 (13-32)	14 (9.2-23)	10 (6.6-16)	7.3 (4.8-11)	5.3 (3.5-8.1)	4.2 (2.8-6.1)	3.4 (2.2-4.7)	2.8 (1.8-3.7)	2.4 (1.6-3.2)	2.0 (1.3-2.8)	1.7 (1.2-2.5)
3	30 (18-42)	22 (13-31)	16 (9.0-23)	11 (6.5-16)	8.1 (4.7-12)	6.2 (3.7-9.0)	4.9 (3.0-7.1)	3.9 (2.4-5.7)	3.3 (2.0-4.7)	2.7 (1.7-3.9)	2.3 (1.5-3.3)
4	43 (25-53)	32 (18-41)	24 (13-30)	17 (9.6-22)	12 (7.1-16)	9.3 (5.6-12)	7.2 (4.5-9.4)	5.6 (3.8-7.5)	4.5 (3.2-6.1)	3.7 (2.7-5.1)	3.1 (2.3-4.3)
5	58 (37-64)	46 (28-52)	35 (21-40)	26 (15-29)	19 (11-21)	14 (8.9-16)	11 (7.2-12)	8.2 (6.0-9.8)	6.4 (5.1-7.8)	5.2 (4.3-6.4)	4.2 (3.6-5.4)
6	72	62	49	38	28	21	16	12	9.2	7.2	5.8

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	9.1	6.8	5.1	3.9	3.0	2.5	2.1	1.8	1.5	1.3	1.1
1	14 (11-24)	11 (8.2-17)	7.9 (6.0-13)	5.9 (4.4-9.1)	4.5 (3.4-6.7)	3.7 (2.7-5.1)	3.0 (2.2-4.0)	2.5 (1.8-3.1)	2.1 (1.5-2.5)	1.8 (1.3-2.1)	1.5 (1.1-1.8)
2	22 (15-35)	16 (11-27)	12 (8.1-20)	9.0 (6.0-14)	6.8 (4.5-11)	5.4 (3.6-8.3)	4.3 (2.9-6.4)	3.5 (2.3-5.0)	2.9 (1.9-4.0)	2.4 (1.6-3.2)	2.1 (1.4-2.7)
3	32 (20-46)	25 (15-36)	18 (11-27)	14 (8.1-20)	10 (6.1-15)	8.0 (4.8-11)	6.3 (3.8-9.0)	5.1 (3.1-7.2)	4.1 (2.6-5.8)	3.4 (2.1-4.7)	2.8 (1.8-3.9)
4	44 (27-55)	35 (20-45)	27 (15-35)	20 (11-26)	15 (8.6-20)	12 (6.8-15)	9.3 (5.5-12)	7.3 (4.5-9.5)	5.8 (3.8-7.7)	4.7 (3.2-6.3)	3.8 (2.7-5.2)
5	57 (37-64)	48 (29-54)	38 (22-43)	30 (17-34)	23 (13-26)	18 (11-20)	14 (8.6-16)	11 (7.0-13)	8.4 (5.8-10)	6.6 (4.9-8.1)	5.3 (4.2-6.6)
6	69	61	51	41	33	26	20	15	12	9.4	7.5

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	11	8.1	6.2	4.8	3.9	3.2	2.7	2.3	1.9	1.6	1.4
1	16 (12-27)	12 (9.3-21)	9.6 (7.1-16)	7.3 (5.4-12)	5.9 (4.3-9.1)	4.8 (3.5-7.2)	3.9 (2.8-5.6)	3.2 (2.3-4.5)	2.7 (1.9-3.6)	2.3 (1.6-2.9)	1.9 (1.4-2.3)
2	24 (16-37)	19 (12-29)	14 (9.5-23)	11 (7.2-18)	8.8 (5.8-14)	7.1 (4.6-11)	5.8 (3.8-8.8)	4.7 (3.1-7.0)	3.8 (2.5-5.6)	3.2 (2.1-4.5)	2.6 (1.7-3.6)
3	33 (21-46)	27 (17-38)	21 (13-31)	16 (9.8-24)	13 (7.8-19)	11 (6.3-15)	8.5 (5.1-12)	6.8 (4.1-9.7)	5.5 (3.4-7.9)	4.5 (2.8-6.4)	3.7 (2.3-5.2)
4	44 (28-55)	37 (22-47)	30 (17-39)	24 (13-31)	19 (11-25)	16 (8.7-20)	12 (7.1-16)	10 (5.9-13)	8.0 (4.8-10)	6.5 (4.0-8.5)	5.2 (3.4-7.0)
5	56 (37-62)	48 (30-55)	41 (24-47)	33 (19-39)	27 (16-32)	22 (13-26)	18 (11-21)	15 (8.7-17)	12 (7.2-14)	9.3 (6.0-11)	7.5 (5.0-9.1)
6	66	60	52	44	38	31	26	21	17	13	11

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	12	9.3	7.4	5.9	5.0	4.2	3.6	3.0	2.6	2.2	1.9
1	17 (12-27)	14 (9.8-22)	11 (7.7-17)	8.8 (6.2-14)	7.3 (5.2-11)	6.2 (4.3-9.4)	5.2 (3.6-7.7)	4.3 (3.0-6.3)	3.7 (2.5-5.1)	3.1 (2.1-4.2)	2.6 (1.8-3.5)
2	24 (16-35)	20 (13-29)	16 (10-24)	13 (8.3-20)	11 (6.9-16)	9.0 (5.8-14)	7.5 (4.8-11)	6.2 (4.0-9.3)	5.2 (3.3-7.7)	4.4 (2.8-6.3)	3.6 (2.3-5.2)
3	33 (21-45)	27 (17-38)	22 (14-32)	18 (11-26)	16 (9.3-22)	13 (7.8-19)	11 (6.5-15)	9.0 (5.4-13)	7.5 (4.5-11)	6.2 (3.7-8.8)	5.2 (3.1-7.3)
4	43 (28-53)	37 (23-46)	31 (18-40)	26 (15-34)	22 (13-29)	19 (11-24)	16 (9.0-20)	13 (7.6-17)	11 (6.4-14)	8.9 (5.3-12)	7.4 (4.5-9.8)
5	53 (35-60)	47 (29-54)	41 (24-47)	35 (20-41)	30 (17-36)	26 (15-31)	22 (12-26)	18 (11-22)	15 (9.0-19)	13 (7.6-16)	11 (6.4-13)
6	63	58	52	46	40	35	30	26	22	18	15