Venezuela - 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 Venezuela. 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	5.8	3.5	2.3	1.6	1.1	0.9	0.8	0.6	0.6	0.6	0.5
1	9.0 (7.3-12)	5.5 (4.8-7.1)	3.5 (3.1-4.5)	2.4 (2.0-3.1)	1.8 (1.4-2.2)	1.4 (1.0-1.7)	1.1 (0.8-1.5)	1.0 (0.6-1.3)	0.9 (0.6-1.2)	0.8 (0.5-1.1)	0.8 (0.5-1.1)
2	14 (9.9-20)	8.4 (6.4-12)	5.4 (4.2-7.7)	3.7 (2.7-5.2)	2.7 (1.8-4.0)	2.1 (1.3-3.3)	1.7 (1.0-2.8)	1.4 (0.8-2.5)	1.3 (0.7-2.2)	1.2 (0.6-2.2)	1.2 (0.6-2.1)
3	20 (14-29)	13 (8.7-17)	8.1 (5.7-11)	5.5 (3.7-8.2)	4.0 (2.4-6.4)	3.1 (1.7-5.3)	2.5 (1.3-4.5)	2.1 (1.0-3.9)	1.9 (0.9-3.6)	1.8 (0.8-3.4)	1.7 (0.8-3.3)
4	29 (20-39)	19 (12-24)	12 (7.7-15)	8.1 (5.2-11)	5.8 (3.8-8.4)	4.5 (2.9-6.9)	3.6 (2.1-5.8)	3.0 (1.7-5.1)	2.7 (1.4-4.6)	2.5 (1.3-4.4)	2.4 (1.2-4.3)
5	40 (32-50)	27 (20-32)	17 (13-20)	12 (8.7-14)	8.4 (6.2-10)	6.4 (4.7-8.4)	5.1 (3.8-7.0)	4.3 (3.2-6.1)	3.8 (2.7-5.5)	3.6 (2.5-5.2)	3.4 (2.3-5.0)
6	54	37	24	17	12	9.0	7.2	6.0	5.3	5.0	4.8

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

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	6.8	4.3	2.8	2.0	1.5	1.2	0.9	0.8	0.7	0.7	0.6
1	10 (8.7-13)	6.6 (5.9-8.1)	4.3 (3.8-5.4)	3.0 (2.5-3.7)	2.2 (1.7-2.8)	1.7 (1.3-2.2)	1.4 (1.0-1.9)	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	15 (12-21)	9.9 (7.7-14)	6.5 (5.2-9.0)	4.5 (3.4-6.2)	3.3 (2.3-4.8)	2.6 (1.6-4.0)	2.1 (1.2-3.4)	1.7 (1.0-2.9)	1.6 (0.8-2.7)	1.5 (0.8-2.5)	1.4 (0.7-2.4)
3	22 (16-30)	15 (10-19)	9.7 (7.0-13)	6.7 (4.7-9.8)	4.9 (3.1-7.8)	3.8 (2.2-6.4)	3.0 (1.6-5.4)	2.5 (1.3-4.6)	2.3 (1.1-4.3)	2.1 (1.0-4.0)	2.0 (0.9-3.8)
4	31 (22-40)	21 (14-26)	14 (9.5-17)	9.7 (6.6-13)	7.1 (4.8-10)	5.4 (3.7-8.3)	4.4 (2.7-6.9)	3.6 (2.1-6.0)	3.2 (1.8-5.5)	3.0 (1.6-5.2)	2.8 (1.5-4.9)
5	42 (35-50)	29 (23-34)	20 (16-22)	14 (11-16)	10 (7.8-13)	7.7 (5.9-10)	6.1 (4.7-8.4)	5.1 (3.8-7.1)	4.5 (3.3-6.5)	4.2 (2.9-6.1)	4.0 (2.7-5.8)
6	55	39	27	19	14	11	8.5	7.0	6.3	5.8	5.5

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	7.6	5.1	3.5	2.6	1.9	1.5	1.2	1.0	0.9	0.9	0.8
1	11 (10-13)	7.6 (6.9-8.9)	5.3 (4.6-6.3)	3.8 (3.1-4.5)	2.9 (2.2-3.4)	2.3 (1.7-2.8)	1.8 (1.3-2.4)	1.5 (1.0-2.0)	1.4 (0.9-1.9)	1.3 (0.8-1.8)	1.2 (0.8-1.7)
2	16 (13-21)	11 (8.9-15)	7.8 (6.2-10)	5.6 (4.3-7.4)	4.2 (3.0-6.0)	3.3 (2.2-4.9)	2.7 (1.6-4.2)	2.2 (1.3-3.6)	2.0 (1.1-3.3)	1.8 (1.0-3.1)	1.7 (0.9-2.9)
3	23 (17-29)	16 (12-20)	11 (8.5-15)	8.1 (5.8-12)	6.1 (4.0-9.4)	4.8 (2.9-7.8)	3.8 (2.2-6.6)	3.2 (1.7-5.6)	2.9 (1.5-5.2)	2.6 (1.3-4.9)	2.4 (1.2-4.6)
4	32 (24-38)	22 (16-26)	16 (11-20)	12 (8.2-15)	8.7 (6.1-12)	6.7 (4.7-10)	5.4 (3.5-8.5)	4.5 (2.7-7.3)	4.0 (2.3-6.7)	3.7 (2.0-6.3)	3.4 (1.9-5.9)
5	42 (36-48)	30 (25-34)	22 (18-25)	16 (13-19)	12 (9.7-15)	9.4 (7.5-12)	7.5 (6.0-10)	6.2 (4.8-8.7)	5.6 (4.1-8.0)	5.1 (3.6-7.4)	4.8 (3.3-6.9)
6	53	40	30	22	17	13	10	8.5	7.6	7.0	6.5

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

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	8.1	5.7	4.1	3.1	2.3	1.8	1.5	1.2	1.1	1.0	0.9
1	12 (11-13)	8.3 (7.4-9.4)	6.0 (5.2-6.9)	4.5 (3.7-5.1)	3.4 (2.7-4.1)	2.7 (2.0-3.3)	2.2 (1.6-2.8)	1.8 (1.3-2.4)	1.6 (1.1-2.2)	1.5 (1.0-2.1)	1.3 (0.9-1.9)
2	17 (13-21)	12 (9.8-15)	8.7 (7.1-11)	6.5 (5.0-8.4)	5.0 (3.6-6.8)	3.9 (2.7-5.7)	3.1 (2.0-4.7)	2.6 (1.6-4.1)	2.3 (1.4-3.8)	2.1 (1.2-3.5)	1.9 (1.1-3.3)
3	23 (18-28)	17 (13-21)	12 (9.6-16)	9.2 (6.9-13)	7.0 (4.9-11)	5.5 (3.6-8.7)	4.5 (2.7-7.3)	3.7 (2.1-6.4)	3.3 (1.8-5.8)	3.0 (1.5-5.4)	2.8 (1.4-5.0)
4	31 (24-36)	23 (18-27)	17 (13-21)	13 (9.5-17)	9.8 (7.2-14)	7.7 (5.6-11)	6.2 (4.3-9.5)	5.2 (3.3-8.2)	4.6 (2.8-7.5)	4.2 (2.4-7.0)	3.8 (2.2-6.5)
5	40 (35-44)	30 (26-34)	23 (20-26)	17 (15-21)	13 (11-17)	11 (8.7-14)	8.5 (7.0-11)	7.1 (5.6-9.9)	6.3 (4.7-9.0)	5.7 (4.1-8.2)	5.3 (3.6-7.6)
6	49	39	30	23	18	14	12	9.6	8.5	7.7	7.1

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	8.7	6.4	4.8	3.6	2.8	2.2	1.8	1.5	1.3	1.2	1.0
1	13 (11-16)	9.5 (8.0-12)	7.1 (5.8-8.7)	5.3 (4.3-6.5)	4.1 (3.2-4.9)	3.2 (2.4-3.8)	2.5 (1.9-3.0)	2.1 (1.5-2.5)	1.8 (1.3-2.1)	1.6 (1.1-1.9)	1.4 (1.0-1.7)
2	19 (15-24)	14 (11-18)	10 (7.9-14)	7.8 (5.8-10)	5.9 (4.3-7.8)	4.5 (3.2-6.1)	3.5 (2.4-4.8)	2.9 (2.0-4.0)	2.5 (1.6-3.5)	2.2 (1.4-3.1)	2.0 (1.2-2.8)
3	27 (21-34)	20 (15-27)	15 (11-20)	11 (8.0-16)	8.5 (5.9-12)	6.5 (4.4-9.4)	5.0 (3.3-7.4)	4.1 (2.6-6.2)	3.5 (2.2-5.4)	3.0 (1.9-4.7)	2.7 (1.6-4.2)
4	37 (30-44)	29 (22-35)	22 (17-27)	16 (12-21)	12 (9.0-16)	9.3 (6.7-12)	7.1 (5.1-9.8)	5.8 (4.0-8.1)	4.8 (3.3-7.0)	4.2 (2.8-6.2)	3.6 (2.5-5.5)
5	48 (40-53)	39 (32-43)	30 (24-34)	23 (18-27)	17 (14-21)	13 (10-16)	10 (8.0-13)	8.1 (6.4-10)	6.7 (5.3-8.8)	5.7 (4.6-7.6)	4.9 (4.0-6.7)
6	59	49	40	32	24	19	14	11	9.2	7.7	6.6

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

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	9.3	7.1	5.4	4.2	3.3	2.6	2.1	1.8	1.5	1.3	1.2
1	15 (11-27)	12 (8.6-20)	8.8 (6.4-15)	6.7 (4.9-11)	5.1 (3.7-8.4)	4.0 (2.9-6.3)	3.1 (2.2-4.7)	2.6 (1.8-3.7)	2.2 (1.5-2.9)	1.9 (1.3-2.4)	1.6 (1.1-2.0)
2	23 (15-36)	18 (12-29)	14 (8.8-22)	11 (6.6-17)	8.0 (5.1-13)	6.1 (3.9-9.7)	4.7 (3.0-7.3)	3.8 (2.4-5.7)	3.2 (2.0-4.6)	2.6 (1.7-3.7)	2.3 (1.4-3.0)
3	33 (21-46)	27 (16-38)	21 (12-30)	16 (9.2-23)	12 (7.0-18)	9.4 (5.3-14)	7.1 (4.1-11)	5.7 (3.3-8.4)	4.6 (2.7-6.8)	3.8 (2.3-5.5)	3.2 (1.9-4.6)
4	45 (28-56)	37 (22-47)	30 (17-39)	24 (13-31)	18 (10-24)	14 (7.8-19)	11 (6.0-14)	8.5 (4.9-11)	6.8 (4.0-9.1)	5.5 (3.4-7.4)	4.5 (2.9-6.1)
5	57 (37-63)	49 (30-56)	41 (24-48)	34 (19-39)	27 (15-32)	21 (11-25)	16 (8.9-19)	13 (7.3-15)	10 (6.1-12)	8.0 (5.1-9.9)	6.4 (4.4-8.1)
6	67	61	53	45	37	30	23	18	15	12	9.3

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	9.2	7.3	5.8	4.6	3.7	3.0	2.4	2.1	1.8	1.6	1.4
1	14 (11-26)	11 (8.3-20)	9.1 (6.5-16)	7.2 (5.1-12)	5.7 (4.0-9.7)	4.5 (3.2-7.5)	3.6 (2.6-5.8)	3.1 (2.1-4.7)	2.6 (1.8-3.8)	2.2 (1.5-3.2)	1.9 (1.3-2.6)
2	21 (14-34)	17 (11-28)	14 (8.9-22)	11 (7.0-18)	8.7 (5.5-14)	6.9 (4.3-11)	5.5 (3.5-8.7)	4.5 (2.9-7.1)	3.8 (2.4-5.8)	3.2 (2.0-4.7)	2.7 (1.7-3.9)
3	30 (19-43)	25 (15-36)	20 (12-30)	16 (9.5-24)	13 (7.6-19)	10 (6.0-15)	8.2 (4.7-12)	6.7 (3.9-9.8)	5.6 (3.3-8.0)	4.6 (2.7-6.6)	3.9 (2.3-5.5)
4	41 (24-51)	35 (20-45)	29 (16-38)	24 (13-31)	19 (10-25)	15 (8.2-20)	12 (6.6-16)	9.9 (5.5-13)	8.1 (4.6-11)	6.7 (3.9-8.9)	5.5 (3.3-7.4)
5	51 (32-58)	45 (26-52)	39 (22-45)	33 (18-38)	27 (14-32)	22 (11-26)	18 (9.2-21)	14 (7.8-17)	12 (6.5-14)	9.7 (5.6-12)	8.0 (4.8-9.9)
6	62	56	50	43	36	30	25	21	17	14	11

FRAX® WHO Fracture Risk Assessment Tool

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

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	8.8	7.2	6.0	4.9	4.1	3.4	2.9	2.5	2.2	2.0	1.7
1	13 (9.4-23)	11 (7.7-19)	9.1 (6.3-16)	7.5 (5.1-13)	6.2 (4.2-10)	5.1 (3.4-8.4)	4.3 (2.9-6.9)	3.7 (2.5-5.8)	3.2 (2.1-4.9)	2.8 (1.9-4.2)	2.4 (1.6-3.5)
2	19 (13-30)	16 (10-26)	13 (8.5-21)	11 (6.9-18)	9.2 (5.7-14)	7.5 (4.7-12)	6.3 (3.9-9.8)	5.4 (3.3-8.3)	4.6 (2.9-7.0)	4.0 (2.5-5.9)	3.4 (2.1-5.0)
3	27 (16-38)	23 (14-33)	19 (11-28)	16 (9.4-24)	13 (7.7-20)	11 (6.3-16)	9.2 (5.3-14)	7.9 (4.5-11)	6.7 (3.9-9.7)	5.7 (3.3-8.2)	4.9 (2.9-7.0)
4	36 (21-46)	31 (18-41)	27 (15-35)	23 (13-30)	19 (10-26)	16 (8.7-21)	13 (7.3-18)	11 (6.2-15)	9.7 (5.3-13)	8.2 (4.6-11)	7.0 (4.0-9.4)
5	46 (28-53)	41 (24-47)	36 (20-42)	31 (17-37)	26 (14-32)	22 (12-27)	19 (9.9-23)	16 (8.5-20)	14 (7.4-17)	12 (6.4-15)	10 (5.6-13)
6	57	52	46	41	35	30	26	22	19	16	14

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	8.3	7.1	6.0	5.1	4.3	3.7	3.2	2.9	2.6	2.3	2.0
1	12 (8.4-20)	10 (7.1-18)	8.9 (6.0-15)	7.6 (5.1-13)	6.4 (4.3-11)	5.4 (3.6-9.1)	4.8 (3.2-7.8)	4.2 (2.8-6.8)	3.7 (2.5-5.9)	3.3 (2.2-5.2)	2.9 (1.9-4.5)
2	17 (11-27)	15 (9.5-24)	13 (8.0-20)	11 (6.8-17)	9.4 (5.8-15)	8.0 (4.9-13)	6.9 (4.2-11)	6.1 (3.7-9.5)	5.4 (3.3-8.2)	4.7 (2.9-7.2)	4.2 (2.6-6.2)
3	24 (15-34)	21 (13-30)	18 (11-26)	16 (9.1-23)	14 (7.7-20)	12 (6.6-17)	10 (5.7-15)	8.8 (5.0-13)	7.8 (4.4-11)	6.8 (3.9-9.9)	6.0 (3.5-8.6)
4	33 (19-42)	29 (17-37)	25 (14-33)	22 (12-29)	19 (11-25)	16 (8.9-22)	14 (7.8-19)	13 (6.9-17)	11 (6.0-15)	9.8 (5.3-13)	8.6 (4.7-12)
5	42 (25-49)	38 (22-44)	34 (19-40)	30 (16-36)	26 (14-31)	23 (12-28)	20 (11-25)	18 (9.3-22)	16 (8.3-19)	14 (7.3-17)	12 (6.5-15)
6	52	48	44	39	35	31	27	25	22	19	17