

Spain - 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 Spain. 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	10	6.3	4.1	2.8	2.1	1.7	1.4	1.2	1.1	1.0	1.0
1	16 (13-20)	9.8 (8.6-13)	6.3 (5.5-8.1)	4.4 (3.6-5.5)	3.2 (2.5-4.1)	2.5 (1.8-3.2)	2.1 (1.4-2.7)	1.8 (1.2-2.4)	1.6 (1.0-2.2)	1.5 (1.0-2.1)	1.4 (0.9-2.0)
2	24 (17-33)	15 (11-21)	9.6 (7.6-14)	6.6 (4.9-9.3)	4.8 (3.3-7.1)	3.8 (2.3-5.9)	3.1 (1.8-5.1)	2.6 (1.4-4.4)	2.3 (1.2-4.1)	2.2 (1.1-3.9)	2.1 (1.1-3.7)
3	34 (23-46)	22 (15-30)	14 (10-19)	9.8 (6.7-14)	7.2 (4.4-11)	5.5 (3.1-9.5)	4.5 (2.3-8.1)	3.8 (1.9-7.1)	3.4 (1.6-6.5)	3.2 (1.5-6.2)	3.1 (1.4-6.0)
4	46 (33-59)	31 (21-40)	21 (14-26)	14 (9.3-19)	10 (6.8-15)	8.0 (5.2-12)	6.5 (3.9-10)	5.5 (3.1-9.1)	4.9 (2.6-8.3)	4.6 (2.4-8.0)	4.4 (2.3-7.7)
5	60 (50-70)	43 (34-51)	29 (22-34)	20 (15-24)	15 (11-18)	11 (8.5-15)	9.2 (6.9-12)	7.7 (5.8-11)	6.9 (4.9-9.8)	6.5 (4.5-9.4)	6.2 (4.2-9.0)
6	74	56	40	28	21	16	13	11	9.5	9.0	8.6

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

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	12	7.8	5.2	3.7	2.7	2.1	1.8	1.5	1.3	1.2	1.2
1	18 (16-22)	12 (11-14)	7.9 (7.0-9.7)	5.6 (4.6-6.8)	4.1 (3.2-5.1)	3.2 (2.4-4.0)	2.6 (1.8-3.4)	2.2 (1.5-3.0)	2.0 (1.3-2.7)	1.8 (1.2-2.6)	1.7 (1.1-2.5)
2	27 (21-36)	18 (14-24)	12 (9.5-16)	8.3 (6.2-11)	6.1 (4.3-8.8)	4.8 (3.0-7.3)	3.9 (2.3-6.2)	3.2 (1.8-5.3)	2.9 (1.6-4.9)	2.7 (1.4-4.7)	2.6 (1.3-4.4)
3	37 (28-48)	25 (19-32)	17 (13-23)	12 (8.6-18)	9.0 (5.8-14)	7.0 (4.1-12)	5.6 (3.1-9.8)	4.7 (2.4-8.5)	4.2 (2.1-7.8)	3.9 (1.9-7.4)	3.7 (1.7-7.0)
4	50 (37-60)	35 (25-43)	24 (17-29)	17 (12-23)	13 (8.7-18)	9.9 (6.7-15)	8.0 (5.0-13)	6.7 (3.9-11)	6.0 (3.3-10)	5.6 (3.0-9.5)	5.2 (2.8-9.0)
5	63 (54-71)	47 (39-54)	34 (27-38)	24 (19-28)	18 (14-22)	14 (11-18)	11 (8.7-15)	9.3 (7.1-13)	8.4 (6.1-12)	7.8 (5.4-11)	7.3 (5.0-11)
6	75	60	45	33	25	19	15	13	11	11	10

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	11	7.3	5.1	3.7	2.8	2.2	1.8	1.5	1.3	1.2	1.1
1	16 (14-19)	11 (9.9-13)	7.6 (6.6-8.9)	5.5 (4.5-6.5)	4.1 (3.2-4.9)	3.2 (2.4-4.0)	2.6 (1.9-3.4)	2.2 (1.5-2.9)	2.0 (1.3-2.7)	1.8 (1.2-2.5)	1.7 (1.1-2.4)
2	23 (18-30)	16 (13-21)	11 (9.0-15)	8.1 (6.2-11)	6.1 (4.3-8.5)	4.7 (3.1-7.0)	3.8 (2.4-5.9)	3.2 (1.8-5.1)	2.9 (1.6-4.7)	2.6 (1.4-4.4)	2.4 (1.3-4.1)
3	32 (24-39)	22 (17-28)	16 (12-21)	12 (8.4-17)	8.7 (5.8-13)	6.8 (4.2-11)	5.5 (3.1-9.3)	4.5 (2.4-8.0)	4.1 (2.1-7.4)	3.8 (1.9-6.9)	3.5 (1.7-6.5)
4	43 (33-51)	31 (23-37)	22 (16-27)	16 (12-21)	12 (8.7-17)	9.6 (6.8-14)	7.8 (5.1-12)	6.4 (4.0-10)	5.8 (3.4-9.5)	5.3 (3.0-8.9)	4.9 (2.7-8.3)
5	55 (48-62)	41 (35-47)	31 (25-34)	23 (19-27)	17 (14-21)	13 (11-17)	11 (8.6-14)	8.9 (6.9-12)	8.0 (5.9-11)	7.3 (5.2-10)	6.8 (4.7-9.8)
6	67	53	40	31	23	18	15	12	11	10	9.2

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

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	12	8.2	6.0	4.5	3.4	2.7	2.2	1.8	1.6	1.5	1.4
1	17 (15-19)	12 (11-13)	8.7 (7.5-9.9)	6.5 (5.3-7.4)	5.0 (3.9-5.9)	3.9 (2.9-4.9)	3.2 (2.3-4.1)	2.7 (1.8-3.5)	2.4 (1.6-3.3)	2.2 (1.4-3.0)	2.0 (1.3-2.8)
2	23 (19-28)	17 (14-21)	12 (10-16)	9.3 (7.2-12)	7.2 (5.2-9.8)	5.6 (3.9-8.1)	4.6 (2.9-6.9)	3.8 (2.3-6.0)	3.4 (2.0-5.5)	3.1 (1.7-5.1)	2.8 (1.5-4.7)
3	31 (25-37)	23 (18-28)	17 (14-23)	13 (9.9-18)	10 (7.1-15)	8.0 (5.2-12)	6.4 (3.9-11)	5.4 (3.1-9.2)	4.8 (2.6-8.4)	4.4 (2.3-7.8)	4.0 (2.0-7.3)
4	40 (33-47)	31 (24-36)	24 (18-29)	18 (14-23)	14 (10-19)	11 (8.1-16)	8.9 (6.2-14)	7.5 (4.9-12)	6.7 (4.1-11)	6.1 (3.5-10)	5.6 (3.1-9.3)
5	50 (45-55)	40 (35-44)	31 (27-36)	24 (21-29)	19 (16-24)	15 (12-19)	12 (10-16)	10 (8.1-14)	9.1 (6.8-13)	8.3 (5.9-12)	7.6 (5.3-11)
6	60	50	40	31	25	20	16	14	12	11	10

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	13	9.7	7.3	5.5	4.3	3.4	2.7	2.3	2.0	1.8	1.6
1	19 (17-24)	14 (12-18)	11 (8.8-13)	8.1 (6.5-9.9)	6.2 (4.9-7.5)	4.8 (3.7-5.8)	3.8 (2.9-4.6)	3.2 (2.3-3.8)	2.8 (2.0-3.3)	2.5 (1.7-2.9)	2.2 (1.5-2.6)
2	27 (22-34)	21 (16-26)	16 (12-20)	12 (8.8-15)	8.9 (6.6-12)	6.9 (4.9-9.2)	5.4 (3.8-7.3)	4.5 (3.0-6.1)	3.9 (2.5-5.3)	3.4 (2.2-4.7)	3.0 (1.9-4.2)
3	38 (30-46)	29 (22-37)	22 (16-29)	17 (12-23)	13 (8.9-18)	9.8 (6.7-14)	7.7 (5.0-11)	6.3 (4.0-9.4)	5.4 (3.4-8.2)	4.7 (2.9-7.2)	4.1 (2.5-6.5)
4	49 (41-57)	39 (32-47)	31 (24-37)	24 (18-30)	18 (14-23)	14 (10-18)	11 (7.8-15)	8.8 (6.2-12)	7.4 (5.2-11)	6.4 (4.4-9.4)	5.6 (3.8-8.4)
5	60 (53-65)	51 (43-56)	41 (34-46)	33 (27-37)	25 (20-30)	20 (16-24)	15 (12-19)	12 (9.8-15)	10 (8.2-13)	8.6 (7.0-11)	7.5 (6.1-10)
6	70	62	53	43	34	27	21	17	14	12	10

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

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	14	10	8.1	6.3	4.9	3.9	3.1	2.6	2.3	2.0	1.8
1	21 (16-36)	17 (12-28)	13 (9.5-22)	9.8 (7.2-17)	7.6 (5.5-12)	5.9 (4.3-9.3)	4.6 (3.3-7.0)	3.8 (2.7-5.5)	3.2 (2.3-4.4)	2.8 (2.0-3.6)	2.4 (1.7-2.9)
2	31 (22-47)	25 (17-38)	20 (13-31)	15 (9.7-24)	12 (7.5-18)	9.0 (5.7-14)	7.0 (4.4-11)	5.7 (3.6-8.5)	4.7 (3.0-6.8)	3.9 (2.5-5.5)	3.3 (2.1-4.5)
3	43 (29-57)	35 (23-48)	29 (17-40)	23 (13-32)	18 (10-25)	14 (7.8-20)	10 (6.0-15)	8.4 (4.9-12)	6.8 (4.0-9.9)	5.6 (3.3-8.2)	4.7 (2.8-6.8)
4	54 (37-65)	47 (30-58)	39 (24-49)	32 (19-41)	26 (15-33)	20 (11-26)	16 (8.8-21)	12 (7.2-17)	10 (5.9-13)	8.1 (4.9-11)	6.6 (4.2-9.0)
5	66 (47-72)	59 (39-65)	51 (32-58)	43 (26-50)	36 (20-42)	29 (16-34)	22 (13-27)	18 (11-22)	14 (8.8-18)	12 (7.4-14)	9.4 (6.4-12)
6	75	69	63	55	47	39	32	26	21	17	13

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	14	11	9.1	7.3	5.9	4.8	3.9	3.4	2.9	2.6	2.3
1	21 (16-36)	17 (13-30)	14 (10-24)	11 (8.0-19)	9.0 (6.4-15)	7.2 (5.1-12)	5.8 (4.1-9.3)	4.9 (3.4-7.6)	4.2 (2.9-6.2)	3.6 (2.5-5.1)	3.1 (2.1-4.3)
2	30 (21-46)	25 (17-39)	20 (14-32)	17 (11-26)	13 (8.6-21)	11 (6.8-17)	8.6 (5.5-13)	7.2 (4.6-11)	6.1 (3.9-9.1)	5.1 (3.3-7.5)	4.4 (2.8-6.3)
3	41 (27-55)	35 (22-48)	29 (18-41)	24 (14-34)	19 (12-28)	16 (9.3-23)	13 (7.4-18)	10 (6.2-15)	8.7 (5.2-12)	7.3 (4.4-10)	6.2 (3.7-8.7)
4	52 (34-63)	45 (29-56)	39 (24-49)	33 (19-42)	27 (16-36)	22 (13-29)	18 (10-24)	15 (8.6-20)	13 (7.3-17)	10 (6.1-14)	8.7 (5.2-12)
5	62 (43-69)	56 (37-63)	50 (31-56)	43 (25-50)	37 (21-43)	31 (17-36)	25 (14-30)	21 (12-26)	18 (10-22)	15 (8.6-18)	12 (7.4-15)
6	72	67	61	55	48	41	35	29	25	21	17

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

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	13	10	8.6	7.1	5.9	4.8	4.1	3.6	3.1	2.8	2.4
1	19 (14-31)	16 (11-26)	13 (9.3-22)	11 (7.6-18)	8.8 (6.2-15)	7.3 (5.1-12)	6.1 (4.2-9.8)	5.2 (3.6-8.2)	4.5 (3.1-6.9)	3.9 (2.7-5.8)	3.4 (2.4-4.9)
2	27 (18-41)	23 (15-35)	19 (13-30)	16 (10-25)	13 (8.4-21)	11 (6.9-17)	9.0 (5.7-14)	7.7 (4.9-12)	6.6 (4.2-10)	5.7 (3.6-8.5)	4.9 (3.1-7.2)
3	37 (24-50)	32 (20-44)	27 (17-38)	23 (14-33)	19 (11-28)	16 (9.4-23)	13 (7.8-19)	11 (6.6-16)	9.6 (5.6-14)	8.2 (4.8-12)	7.0 (4.2-9.9)
4	48 (31-59)	42 (26-53)	37 (22-47)	32 (18-41)	27 (15-35)	23 (13-30)	19 (11-25)	16 (9.1-22)	14 (7.9-18)	12 (6.8-16)	10 (5.9-13)
5	59 (39-65)	53 (34-60)	48 (29-54)	42 (25-48)	37 (21-43)	31 (17-37)	27 (15-32)	23 (13-28)	20 (11-24)	17 (9.5-20)	14 (8.2-18)
6	68	64	59	54	48	42	36	32	27	24	20

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	7.5	6.3	5.3	4.5	3.8	3.2	2.8	2.5	2.2	1.9	1.7
1	11 (8.0-19)	9.6 (6.7-16)	8.1 (5.6-14)	6.8 (4.7-11)	5.7 (3.9-9.5)	4.8 (3.3-8.0)	4.1 (2.8-6.8)	3.6 (2.5-5.9)	3.2 (2.2-5.1)	2.8 (1.9-4.4)	2.5 (1.7-3.8)
2	17 (11-26)	14 (9.0-22)	12 (7.6-19)	10 (6.3-16)	8.5 (5.3-13)	7.2 (4.4-11)	6.2 (3.8-9.7)	5.4 (3.4-8.4)	4.7 (2.9-7.3)	4.1 (2.6-6.3)	3.6 (2.2-5.5)
3	23 (14-33)	20 (12-29)	17 (10-25)	15 (8.7-22)	13 (7.3-18)	11 (6.1-16)	9.2 (5.3-14)	8.0 (4.6-12)	6.9 (4.0-10)	6.0 (3.5-8.8)	5.3 (3.0-7.6)
4	32 (19-41)	28 (16-37)	24 (14-32)	21 (12-28)	18 (9.9-24)	15 (8.4-21)	13 (7.2-18)	12 (6.3-16)	10 (5.6-14)	8.8 (4.9-12)	7.7 (4.3-10)
5	42 (25-48)	38 (22-44)	33 (19-39)	29 (16-35)	25 (14-30)	22 (11-26)	19 (10-23)	17 (8.8-20)	15 (7.7-18)	13 (6.8-16)	11 (6.0-14)
6	52	48	44	39	35	30	27	24	21	18	16