

Spain - The probabilities of a hip fracture in men

The following tables give the 10-year probability (%) of a hip 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	8.3	4.4	2.3	1.2	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	13 (8.7-17)	7.0 (4.6-9.2)	3.7 (2.5-4.9)	2.0 (1.3-2.6)	1.0 (0.7-1.4)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	20 (12-29)	11 (6.5-16)	5.9 (3.5-8.9)	3.1 (1.8-4.8)	1.7 (1.0-2.5)	0.9 (0.5-1.3)	0.5 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
3	29 (18-43)	17 (9.8-26)	9.2 (5.2-15)	4.9 (2.8-7.9)	2.6 (1.5-4.2)	1.4 (0.8-2.2)	0.7 (0.4-1.2)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	41 (28-56)	25 (16-36)	14 (8.8-21)	7.6 (4.7-12)	4.1 (2.5-6.4)	2.1 (1.3-3.4)	1.1 (0.7-1.8)	0.6 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	55 (45-68)	35 (27-47)	21 (15-29)	12 (8.4-16)	6.2 (4.5-9.0)	3.3 (2.4-4.8)	1.8 (1.3-2.6)	0.9 (0.7-1.3)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
6	70	48	30	17	9.4	5.1	2.7	1.4	0.8	0.4	0.2

Ten year probability of hip 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	9.5	5.3	2.9	1.6	0.9	0.5	0.3	0.1	0.1	0.0	0.0
1	15 (10-18)	8.3 (5.6-10)	4.6 (3.1-5.7)	2.5 (1.7-3.1)	1.4 (0.9-1.7)	0.8 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
2	22 (14-30)	13 (7.9-18)	7.1 (4.4-10)	3.9 (2.4-5.7)	2.2 (1.3-3.1)	1.2 (0.7-1.7)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	31 (20-44)	19 (12-27)	11 (6.6-16)	6.0 (3.6-9.3)	3.3 (2.0-5.2)	1.8 (1.1-2.9)	1.0 (0.6-1.6)	0.5 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	43 (31-57)	27 (19-38)	16 (11-24)	9.2 (6.1-14)	5.1 (3.3-7.8)	2.8 (1.8-4.4)	1.5 (1.0-2.4)	0.8 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
5	56 (48-68)	38 (31-49)	23 (19-32)	14 (11-19)	7.7 (6.0-11)	4.3 (3.3-6.1)	2.4 (1.8-3.4)	1.3 (1.0-1.9)	0.7 (0.6-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
6	70	51	33	20	11	6.4	3.6	2.0	1.1	0.6	0.4

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	8.0	4.7	2.8	1.6	0.9	0.5	0.3	0.2	0.1	0.1	0.0
1	12 (8.4-14)	7.2 (5.0-8.4)	4.2 (2.9-5.0)	2.5 (1.7-2.9)	1.4 (1.0-1.7)	0.8 (0.6-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	18 (12-24)	11 (7.0-15)	6.4 (4.1-8.8)	3.8 (2.4-5.2)	2.2 (1.4-3.1)	1.3 (0.8-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	25 (17-35)	16 (10-23)	9.6 (6.2-14)	5.7 (3.6-8.4)	3.4 (2.1-5.0)	2.0 (1.2-2.9)	1.1 (0.7-1.7)	0.7 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
4	35 (27-47)	23 (17-32)	14 (10-20)	8.5 (6.0-12)	5.0 (3.5-7.5)	3.0 (2.1-4.4)	1.7 (1.2-2.6)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
5	47 (41-58)	32 (27-41)	20 (17-27)	12 (10-17)	7.5 (6.2-10)	4.4 (3.6-6.2)	2.6 (2.1-3.7)	1.5 (1.2-2.1)	0.9 (0.8-1.3)	0.5 (0.5-0.8)	0.3 (0.3-0.5)
6	60	43	29	18	11	6.5	3.8	2.3	1.4	0.8	0.5

Ten year probability of hip 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	8.3	5.2	3.2	2.0	1.2	0.8	0.5	0.3	0.2	0.1	0.1
1	12 (8.7-14)	7.7 (5.5-8.8)	4.8 (3.4-5.6)	3.0 (2.1-3.5)	1.9 (1.3-2.2)	1.1 (0.8-1.3)	0.7 (0.5-0.8)	0.4 (0.3-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	17 (12-22)	11 (7.6-14)	7.1 (4.8-9.1)	4.4 (3.0-5.8)	2.8 (1.8-3.6)	1.7 (1.1-2.2)	1.1 (0.7-1.4)	0.7 (0.4-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	24 (18-31)	16 (11-21)	10 (7.2-14)	6.5 (4.5-8.8)	4.1 (2.8-5.6)	2.5 (1.7-3.5)	1.6 (1.1-2.2)	1.0 (0.7-1.4)	0.6 (0.4-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
4	32 (26-41)	22 (17-29)	15 (11-20)	9.4 (7.1-13)	5.9 (4.5-8.4)	3.7 (2.8-5.3)	2.3 (1.7-3.3)	1.5 (1.1-2.1)	0.9 (0.7-1.3)	0.6 (0.4-0.9)	0.4 (0.3-0.5)
5	42 (38-51)	30 (27-38)	20 (18-27)	13 (12-18)	8.6 (7.3-12)	5.4 (4.6-7.4)	3.4 (2.9-4.7)	2.1 (1.8-2.9)	1.4 (1.1-1.9)	0.9 (0.7-1.2)	0.6 (0.5-0.8)
6	52	39	28	19	12	7.8	4.9	3.1	2.0	1.3	0.8

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	9.2	6.1	4.0	2.7	1.7	1.1	0.7	0.5	0.3	0.2	0.2
1	14 (13-18)	9.8 (8.6-13)	6.5 (5.7-8.4)	4.3 (3.8-5.6)	2.9 (2.5-3.7)	1.9 (1.6-2.4)	1.2 (1.1-1.6)	0.8 (0.7-1.1)	0.6 (0.5-0.7)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
2	22 (18-28)	15 (13-20)	10 (8.5-14)	7.0 (5.7-9.3)	4.6 (3.7-6.2)	3.1 (2.5-4.1)	2.0 (1.6-2.7)	1.3 (1.1-1.8)	0.9 (0.7-1.2)	0.6 (0.5-0.8)	0.4 (0.3-0.6)
3	32 (26-38)	23 (18-28)	16 (13-20)	11 (8.6-14)	7.4 (5.7-9.4)	4.9 (3.8-6.3)	3.3 (2.5-4.2)	2.2 (1.7-2.8)	1.5 (1.1-1.9)	1.0 (0.8-1.3)	0.7 (0.5-0.9)
4	44 (36-50)	33 (27-39)	24 (19-28)	17 (13-20)	12 (8.7-14)	7.9 (5.8-9.4)	5.2 (3.9-6.3)	3.5 (2.6-4.3)	2.4 (1.8-2.9)	1.6 (1.2-2.0)	1.1 (0.8-1.4)
5	56 (48-60)	45 (37-48)	35 (28-37)	25 (20-28)	18 (14-20)	12 (9.4-14)	8.3 (6.3-9.3)	5.7 (4.3-6.4)	3.9 (2.9-4.4)	2.6 (2.0-3.0)	1.8 (1.4-2.1)
6	67	57	47	36	26	19	13	8.9	6.2	4.2	2.9

Ten year probability of hip 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	9.8	7.0	4.9	3.4	2.4	1.7	1.2	0.8	0.6	0.4	0.3
1	17 (13-34)	13 (9.7-26)	9.1 (6.9-19)	6.5 (4.8-14)	4.6 (3.4-9.9)	3.2 (2.4-7.0)	2.3 (1.6-4.9)	1.6 (1.2-3.5)	1.2 (0.8-2.5)	0.8 (0.6-1.8)	0.6 (0.4-1.3)
2	27 (18-44)	21 (13-35)	16 (9.6-27)	11 (6.8-21)	8.2 (4.8-15)	5.8 (3.4-11)	4.1 (2.3-7.9)	3.0 (1.7-5.7)	2.1 (1.2-4.1)	1.5 (0.9-3.0)	1.1 (0.6-2.2)
3	39 (24-54)	31 (18-46)	24 (13-37)	19 (9.6-29)	14 (6.9-22)	10 (4.9-16)	7.1 (3.4-12)	5.2 (2.5-8.5)	3.8 (1.8-6.2)	2.7 (1.3-4.5)	2.0 (0.9-3.3)
4	52 (32-63)	44 (25-55)	36 (19-46)	28 (14-37)	22 (10-29)	16 (7.3-22)	12 (5.2-16)	8.7 (3.7-12)	6.4 (2.7-8.8)	4.7 (1.9-6.5)	3.4 (1.4-4.7)
5	64 (42-70)	56 (34-63)	48 (27-55)	40 (20-46)	32 (15-37)	25 (11-29)	19 (7.9-22)	14 (5.8-16)	11 (4.3-12)	7.8 (3.1-9.0)	5.7 (2.2-6.7)
6	74	68	61	53	44	36	28	22	17	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	9.9	7.4	5.5	4.1	3.0	2.2	1.7	1.3	1.0	0.7	0.5
1	17 (13-33)	13 (9.6-27)	10 (7.2-21)	7.5 (5.4-16)	5.7 (4.0-12)	4.2 (2.9-9.3)	3.1 (2.2-7.0)	2.4 (1.7-5.3)	1.8 (1.3-4.1)	1.4 (0.9-3.1)	1.0 (0.7-2.3)
2	26 (16-43)	21 (13-36)	16 (9.7-29)	13 (7.3-23)	9.7 (5.5-18)	7.3 (4.1-14)	5.5 (3.1-10)	4.3 (2.3-8.1)	3.3 (1.8-6.3)	2.5 (1.3-4.8)	1.9 (1.0-3.7)
3	37 (22-53)	31 (17-45)	25 (13-38)	20 (10-31)	16 (7.6-25)	12 (5.7-20)	9.2 (4.3-15)	7.2 (3.3-12)	5.5 (2.5-9.3)	4.3 (1.9-7.2)	3.3 (1.5-5.6)
4	49 (29-61)	42 (23-54)	35 (18-47)	29 (14-39)	24 (11-32)	19 (8.4-26)	15 (6.4-21)	12 (4.9-16)	9.0 (3.8-13)	7.0 (2.9-10)	5.4 (2.2-7.7)
5	61 (38-67)	54 (32-60)	47 (26-53)	40 (20-46)	34 (16-39)	27 (12-32)	22 (9.4-26)	18 (7.3-21)	14 (5.7-17)	11 (4.4-13)	8.7 (3.4-10)
6	71	66	60	53	45	38	32	26	21	17	13

Ten year probability of hip 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	7.9	6.1	4.8	3.7	2.9	2.2	1.8	1.4	1.1	0.9	0.7
1	14 (10-28)	11 (8.0-23)	8.7 (6.3-19)	6.9 (4.9-15)	5.4 (3.8-12)	4.2 (2.9-9.2)	3.3 (2.3-7.3)	2.7 (1.8-5.9)	2.1 (1.5-4.7)	1.7 (1.2-3.8)	1.3 (0.9-3.0)
2	22 (14-38)	18 (11-32)	15 (8.5-26)	12 (6.7-21)	9.3 (5.2-17)	7.3 (4.1-14)	5.8 (3.2-11)	4.7 (2.6-8.9)	3.8 (2.1-7.2)	3.0 (1.6-5.8)	2.4 (1.3-4.7)
3	32 (18-48)	27 (15-41)	23 (12-35)	19 (9.3-29)	15 (7.3-24)	12 (5.7-20)	9.7 (4.5-16)	7.9 (3.6-13)	6.4 (2.9-11)	5.2 (2.3-8.7)	4.1 (1.9-7.0)
4	44 (25-56)	38 (21-50)	33 (17-44)	28 (13-37)	23 (11-31)	19 (8.5-26)	15 (6.8-22)	13 (5.5-18)	10 (4.4-15)	8.4 (3.5-12)	6.8 (2.8-9.7)
5	56 (34-63)	51 (29-57)	45 (24-51)	39 (19-45)	33 (16-38)	28 (12-33)	23 (10-27)	19 (8.1-23)	16 (6.6-19)	13 (5.3-16)	11 (4.3-13)
6	67	62	57	51	45	39	33	29	24	20	17

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	4.1	3.3	2.7	2.2	1.8	1.5	1.2	1.0	0.9	0.7	0.6
1	7.4 (5.3-16)	6.1 (4.4-13)	5.0 (3.6-11)	4.1 (2.9-9.1)	3.4 (2.4-7.5)	2.8 (1.9-6.1)	2.3 (1.6-5.1)	1.9 (1.3-4.3)	1.6 (1.1-3.6)	1.3 (0.9-3.0)	1.1 (0.8-2.5)
2	12 (7.1-23)	10 (5.8-19)	8.6 (4.8-16)	7.1 (3.9-13)	5.9 (3.2-11)	4.8 (2.6-9.1)	4.0 (2.2-7.7)	3.4 (1.8-6.5)	2.9 (1.5-5.5)	2.4 (1.3-4.6)	2.0 (1.1-3.9)
3	19 (9.8-30)	16 (8.1-26)	14 (6.7-22)	12 (5.5-19)	9.6 (4.5-16)	8.0 (3.7-13)	6.7 (3.1-11)	5.7 (2.6-9.5)	4.8 (2.2-8.1)	4.1 (1.8-6.9)	3.4 (1.5-5.8)
4	28 (14-38)	24 (12-33)	21 (9.6-29)	18 (7.9-25)	15 (6.6-21)	13 (5.4-18)	11 (4.5-15)	9.2 (3.8-13)	7.8 (3.2-11)	6.6 (2.7-9.5)	5.6 (2.3-8.1)
5	39 (20-45)	35 (17-40)	30 (14-35)	26 (12-30)	23 (9.7-26)	19 (8.0-23)	16 (6.8-20)	14 (5.7-17)	12 (4.8-15)	10 (4.1-12)	8.9 (3.4-11)
6	50	46	41	37	32	28	24	21	18	16	14