

Spain - The probabilities of a hip fracture in women

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	6.0	3.1	1.6	0.8	0.4	0.2	0.1	0.1	0.0	0.0	0.0
1	9.6 (6.3-12)	5.0 (3.3-6.5)	2.6 (1.7-3.4)	1.3 (0.9-1.7)	0.7 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	15 (8.9-22)	7.9 (4.6-12)	4.1 (2.4-6.3)	2.1 (1.2-3.2)	1.1 (0.6-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
3	23 (13-35)	12 (7.0-20)	6.5 (3.6-11)	3.4 (1.9-5.6)	1.7 (0.9-2.9)	0.9 (0.5-1.5)	0.4 (0.2-0.8)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
4	33 (22-48)	19 (12-29)	10 (6.2-16)	5.3 (3.2-8.4)	2.7 (1.6-4.4)	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)
5	47 (37-61)	28 (21-38)	15 (11-22)	8.1 (5.9-12)	4.2 (3.1-6.1)	2.2 (1.6-3.2)	1.1 (0.8-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
6	62	40	23	12	6.5	3.3	1.7	0.9	0.5	0.3	0.1

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	7.0	3.8	2.1	1.1	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	11 (7.4-13)	6.0 (4.0-7.4)	3.3 (2.2-4.0)	1.8 (1.2-2.2)	1.0 (0.6-1.2)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	17 (10-24)	9.4 (5.7-13)	5.2 (3.1-7.5)	2.8 (1.7-4.1)	1.5 (0.9-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.6)	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	25 (15-37)	14 (8.5-22)	8.0 (4.7-13)	4.4 (2.5-7.0)	2.4 (1.4-3.8)	1.3 (0.7-2.1)	0.7 (0.4-1.1)	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	36 (25-51)	21 (14-32)	12 (8.0-19)	6.7 (4.4-10)	3.7 (2.4-5.7)	2.0 (1.3-3.1)	1.1 (0.7-1.7)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	49 (42-63)	31 (25-42)	18 (14-25)	10 (8.0-14)	5.6 (4.4-8.1)	3.0 (2.4-4.4)	1.6 (1.3-2.4)	0.9 (0.7-1.3)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
6	65	43	26	15	8.5	4.6	2.5	1.4	0.8	0.4	0.2

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	6.8	3.9	2.2	1.2	0.7	0.4	0.2	0.1	0.1	0.0	0.0
1	10 (7.2-12)	6.0 (4.1-7.1)	3.4 (2.3-4.0)	1.9 (1.3-2.3)	1.1 (0.7-1.3)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	16 (10-21)	9.2 (5.7-13)	5.2 (3.2-7.2)	2.9 (1.8-4.1)	1.6 (1.0-2.3)	0.9 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
3	23 (15-34)	14 (8.6-21)	8.0 (4.9-12)	4.5 (2.7-6.9)	2.5 (1.5-3.9)	1.4 (0.9-2.2)	0.8 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
4	33 (24-46)	20 (14-30)	12 (8.3-18)	6.9 (4.7-10)	3.9 (2.6-5.9)	2.2 (1.5-3.3)	1.2 (0.8-1.9)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
5	46 (40-59)	29 (25-39)	18 (15-24)	10 (8.4-14)	5.8 (4.8-8.3)	3.3 (2.7-4.7)	1.9 (1.5-2.7)	1.1 (0.9-1.6)	0.6 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
6	60	41	25	15	8.7	5.0	2.8	1.6	1.0	0.6	0.3

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	8.5	5.0	2.9	1.7	1.0	0.6	0.3	0.2	0.1	0.1	0.0
1	13 (8.9-15)	7.6 (5.3-9.1)	4.5 (3.1-5.4)	2.6 (1.8-3.2)	1.5 (1.0-1.8)	0.9 (0.6-1.1)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.1-0.1)
2	19 (12-24)	11 (7.4-15)	6.8 (4.4-9.0)	4.0 (2.5-5.3)	2.3 (1.5-3.1)	1.4 (0.9-1.8)	0.8 (0.5-1.1)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	27 (18-37)	17 (11-24)	10 (6.6-15)	6.0 (3.9-8.7)	3.5 (2.3-5.2)	2.1 (1.3-3.0)	1.2 (0.8-1.8)	0.7 (0.5-1.1)	0.4 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
4	37 (29-50)	24 (18-34)	15 (11-21)	8.9 (6.4-13)	5.3 (3.8-7.8)	3.1 (2.2-4.6)	1.9 (1.3-2.8)	1.1 (0.8-1.7)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
5	50 (43-62)	34 (28-44)	21 (18-29)	13 (11-18)	7.8 (6.3-11)	4.6 (3.7-6.5)	2.8 (2.2-3.9)	1.7 (1.4-2.4)	1.0 (0.8-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.5)
6	63	45	30	19	11	6.8	4.1	2.5	1.5	0.9	0.6

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	11	6.9	4.2	2.6	1.6	1.0	0.6	0.4	0.2	0.2	0.1
1	18 (15-22)	11 (9.6-14)	7.0 (5.9-8.8)	4.3 (3.6-5.4)	2.6 (2.2-3.3)	1.6 (1.4-2.0)	1.0 (0.9-1.3)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.2 (0.1-0.2)
2	28 (22-36)	18 (14-24)	11 (8.9-15)	7.1 (5.5-9.7)	4.4 (3.3-6.0)	2.7 (2.1-3.7)	1.7 (1.3-2.3)	1.1 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
3	42 (32-51)	28 (21-36)	18 (13-24)	12 (8.3-16)	7.2 (5.1-9.8)	4.5 (3.2-6.1)	2.8 (2.0-3.9)	1.8 (1.3-2.5)	1.1 (0.8-1.6)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
4	58 (47-66)	42 (33-50)	29 (21-35)	19 (14-23)	12 (8.5-15)	7.4 (5.3-9.3)	4.7 (3.4-6.0)	3.0 (2.1-3.8)	1.9 (1.3-2.4)	1.2 (0.8-1.5)	0.7 (0.5-1.0)
5	74 (66-78)	58 (50-63)	42 (35-47)	29 (23-33)	19 (15-21)	12 (9.5-14)	7.7 (6.1-9.0)	4.9 (3.9-5.8)	3.1 (2.4-3.7)	2.0 (1.5-2.3)	1.2 (1.0-1.5)
6	85	74	59	43	29	19	13	8.1	5.2	3.3	2.1

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	15	9.5	6.1	3.9	2.5	1.6	1.1	0.7	0.5	0.3	0.2
1	26 (20-48)	18 (13-35)	12 (8.6-24)	7.7 (5.5-16)	5.0 (3.5-10)	3.3 (2.3-7.0)	2.2 (1.5-4.6)	1.4 (1.0-3.1)	0.9 (0.7-2.0)	0.6 (0.4-1.3)	0.4 (0.3-0.9)
2	41 (27-65)	30 (18-51)	21 (12-38)	14 (7.8-26)	9.2 (5.0-18)	6.2 (3.3-12)	4.1 (2.2-8.2)	2.7 (1.4-5.5)	1.8 (0.9-3.6)	1.2 (0.6-2.4)	0.8 (0.4-1.6)
3	58 (38-76)	46 (26-64)	34 (18-51)	24 (12-38)	16 (7.5-27)	11 (5.0-19)	7.5 (3.3-13)	5.0 (2.2-8.8)	3.3 (1.4-5.9)	2.2 (0.9-3.9)	1.5 (0.6-2.6)
4	73 (52-83)	62 (38-75)	50 (27-64)	37 (18-50)	27 (12-37)	19 (8.1-27)	13 (5.4-19)	8.8 (3.6-13)	5.9 (2.4-8.8)	3.9 (1.6-5.9)	2.6 (1.0-3.9)
5	83 (67-88)	77 (54-82)	67 (41-73)	54 (29-61)	41 (20-48)	30 (14-36)	22 (9.4-26)	15 (6.3-18)	10 (4.2-12)	6.8 (2.8-8.3)	4.6 (1.8-5.6)
6	89	86	81	71	58	46	34	24	17	12	7.8

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	17	12	8.1	5.5	3.7	2.6	1.8	1.2	0.9	0.6	0.4
1	29 (22-53)	21 (15-41)	15 (11-30)	10 (7.2-22)	7.2 (4.9-15)	5.1 (3.4-11)	3.5 (2.4-7.6)	2.5 (1.6-5.3)	1.7 (1.1-3.7)	1.2 (0.8-2.6)	0.8 (0.5-1.8)
2	44 (29-67)	34 (21-56)	25 (15-44)	18 (10-33)	13 (6.9-24)	9.2 (4.8-18)	6.5 (3.3-13)	4.6 (2.3-9.1)	3.2 (1.6-6.4)	2.2 (1.1-4.5)	1.5 (0.8-3.1)
3	58 (40-76)	48 (30-67)	38 (21-56)	29 (15-45)	21 (10-34)	16 (7.2-26)	11 (5.1-19)	8.0 (3.5-14)	5.7 (2.4-9.9)	4.0 (1.7-7.0)	2.8 (1.2-4.9)
4	71 (52-82)	63 (41-75)	53 (30-66)	43 (22-56)	33 (16-45)	25 (11-36)	19 (7.9-27)	14 (5.6-20)	9.7 (3.9-15)	6.8 (2.7-10)	4.8 (1.9-7.4)
5	81 (64-85)	75 (54-80)	67 (43-74)	58 (33-65)	48 (24-55)	38 (18-45)	29 (13-35)	22 (9.3-27)	16 (6.6-20)	11 (4.6-14)	8.1 (3.2-10)
6	87	84	79	72	63	53	43	33	25	18	13

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	14	10	7.4	5.3	3.8	2.8	2.1	1.5	1.1	0.8	0.6
1	25 (18-46)	18 (13-36)	14 (9.6-28)	9.9 (6.9-21)	7.3 (5.0-16)	5.4 (3.7-12)	4.0 (2.7-8.6)	2.9 (2.0-6.4)	2.1 (1.4-4.7)	1.6 (1.0-3.4)	1.1 (0.8-2.5)
2	38 (25-59)	30 (18-50)	23 (13-40)	17 (9.6-31)	13 (7.1-24)	9.7 (5.2-19)	7.2 (3.8-14)	5.3 (2.8-11)	3.9 (2.0-7.8)	2.9 (1.5-5.8)	2.1 (1.1-4.2)
3	52 (34-70)	43 (26-62)	35 (19-52)	27 (14-42)	21 (11-34)	16 (7.8-26)	12 (5.7-20)	9.3 (4.2-15)	6.9 (3.1-12)	5.1 (2.2-8.7)	3.8 (1.6-6.4)
4	65 (45-77)	58 (36-70)	49 (27-62)	40 (20-52)	32 (15-44)	26 (12-36)	20 (8.7-28)	15 (6.5-22)	12 (4.8-17)	8.7 (3.5-13)	6.4 (2.6-9.6)
5	76 (57-81)	70 (48-76)	63 (39-70)	55 (30-62)	46 (24-54)	38 (18-45)	31 (14-37)	24 (10-29)	19 (7.8-23)	14 (5.8-18)	11 (4.3-13)
6	83	80	75	69	61	53	44	36	29	22	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	8.2	6.2	4.6	3.5	2.7	2.1	1.6	1.3	1.0	0.7	0.6
1	15 (11-29)	11 (8.0-23)	8.6 (6.0-18)	6.6 (4.6-14)	5.2 (3.6-11)	4.0 (2.8-8.8)	3.1 (2.1-6.9)	2.4 (1.7-5.4)	1.9 (1.3-4.2)	1.4 (1.0-3.2)	1.1 (0.8-2.5)
2	23 (15-40)	19 (11-33)	15 (8.4-26)	11 (6.4-21)	9.0 (5.0-17)	7.1 (3.9-14)	5.6 (3.0-11)	4.4 (2.3-8.5)	3.4 (1.8-6.7)	2.6 (1.4-5.2)	2.0 (1.1-4.1)
3	35 (20-51)	29 (15-43)	23 (12-36)	18 (9.1-29)	15 (7.2-24)	12 (5.6-20)	9.5 (4.4-16)	7.5 (3.4-13)	5.9 (2.7-9.9)	4.6 (2.1-7.8)	3.6 (1.6-6.1)
4	48 (28-60)	41 (22-53)	34 (17-45)	28 (13-38)	23 (11-32)	19 (8.4-26)	15 (6.6-21)	12 (5.2-17)	9.8 (4.0-14)	7.7 (3.1-11)	6.0 (2.4-8.8)
5	60 (37-66)	54 (31-60)	47 (25-53)	40 (20-46)	34 (16-40)	29 (13-34)	24 (10-28)	19 (8.1-23)	16 (6.4-19)	12 (5.0-15)	9.8 (3.9-12)
6	71	66	60	53	47	41	35	29	24	19	16