



Finland - 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 Finland. 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	19	12	7.6	5.2	3.8	3.0	2.5	2.1	1.9	1.8	1.7
1	28 (23-35)	18 (16-23)	12 (10-15)	8.0 (6.7-10)	5.8 (4.5-7.4)	4.5 (3.3-5.7)	3.7 (2.6-4.8)	3.1 (2.1-4.2)	2.8 (1.8-3.9)	2.7 (1.7-3.7)	2.5 (1.6-3.6)
2	40 (30-53)	26 (20-36)	17 (14-24)	12 (9.0-17)	8.7 (6.0-13)	6.7 (4.3-10)	5.5 (3.2-8.9)	4.6 (2.6-7.8)	4.1 (2.2-7.1)	3.9 (2.0-6.8)	3.7 (1.9-6.6)
3	54 (40-67)	37 (27-48)	25 (18-33)	18 (12-25)	13 (8.1-20)	9.9 (5.7-16)	8.0 (4.3-14)	6.7 (3.4-12)	6.0 (2.9-11)	5.7 (2.6-11)	5.4 (2.5-10)
4	67 (53-79)	50 (36-61)	35 (24-43)	25 (17-32)	18 (12-25)	14 (9.3-21)	11 (7.0-18)	9.6 (5.5-16)	8.5 (4.6-14)	8.1 (4.2-14)	7.7 (4.0-13)
5	79 (71-86)	64 (53-72)	47 (38-54)	34 (27-39)	26 (19-31)	20 (15-25)	16 (12-21)	13 (10-18)	12 (8.7-17)	11 (7.9-16)	11 (7.4-15)
6	88	76	61	46	35	27	22	18	16	15	15

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

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	18	12	8.0	5.6	4.2	3.3	2.7	2.3	2.0	1.9	1.8
1	27 (23-32)	18 (16-21)	12 (11-15)	8.5 (7.0-10)	6.3 (4.9-7.7)	4.9 (3.6-6.1)	4.0 (2.8-5.2)	3.4 (2.3-4.5)	3.0 (2.0-4.2)	2.8 (1.8-3.9)	2.7 (1.7-3.8)
2	38 (30-49)	26 (21-34)	18 (14-24)	12 (9.5-17)	9.3 (6.5-13)	7.2 (4.7-11)	5.9 (3.5-9.3)	4.9 (2.8-8.1)	4.4 (2.4-7.5)	4.1 (2.2-7.1)	3.9 (2.0-6.7)
3	50 (39-61)	36 (27-44)	25 (19-33)	18 (13-26)	13 (8.7-21)	10 (6.2-17)	8.5 (4.7-15)	7.1 (3.7-13)	6.4 (3.1-12)	5.9 (2.8-11)	5.6 (2.6-11)
4	63 (50-73)	48 (36-56)	35 (25-41)	25 (18-32)	19 (13-26)	15 (10-22)	12 (7.6-19)	10 (5.9-16)	9.0 (5.0-15)	8.4 (4.5-14)	7.9 (4.2-13)
5	75 (68-81)	61 (52-67)	46 (38-51)	34 (28-40)	26 (21-32)	20 (16-26)	17 (13-22)	14 (11-19)	12 (9.1-17)	12 (8.1-16)	11 (7.5-16)
6	84	73	58	45	35	28	22	19	17	16	15

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	16	11	7.7	5.6	4.2	3.3	2.7	2.2	2.0	1.9	1.7
1	23 (21-27)	16 (15-19)	11 (9.9-13)	8.3 (6.8-9.8)	6.3 (4.9-7.4)	4.9 (3.6-6.1)	4.0 (2.8-5.2)	3.3 (2.3-4.4)	3.0 (2.0-4.1)	2.8 (1.8-3.9)	2.6 (1.6-3.6)
2	32 (26-40)	23 (19-29)	16 (13-21)	12 (9.2-16)	9.1 (6.5-13)	7.1 (4.7-11)	5.8 (3.6-8.9)	4.8 (2.8-7.7)	4.3 (2.4-7.2)	4.0 (2.2-6.7)	3.7 (2.0-6.3)
3	43 (34-52)	32 (24-38)	23 (18-30)	17 (13-24)	13 (8.8-19)	10 (6.3-16)	8.2 (4.8-14)	6.8 (3.7-12)	6.2 (3.2-11)	5.7 (2.8-10)	5.3 (2.6-9.8)
4	54 (44-62)	42 (32-48)	31 (23-37)	24 (17-30)	18 (13-25)	14 (10-21)	11 (7.6-18)	9.5 (5.9-15)	8.6 (5.0-14)	7.9 (4.4-13)	7.4 (4.0-12)
5	65 (59-71)	53 (46-58)	41 (35-46)	32 (26-37)	24 (20-30)	19 (16-25)	16 (13-21)	13 (10-18)	12 (8.7-17)	11 (7.7-15)	10 (7.0-15)
6	75	64	52	41	32	26	21	18	16	15	14

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

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	16	12	8.6	6.4	5.0	3.9	3.2	2.7	2.4	2.2	2.0
1	23 (21-26)	17 (15-19)	12 (11-14)	9.3 (7.6-11)	7.2 (5.6-8.5)	5.7 (4.2-7.1)	4.6 (3.3-5.9)	3.9 (2.7-5.2)	3.5 (2.3-4.8)	3.2 (2.1-4.4)	2.9 (1.9-4.1)
2	31 (25-37)	23 (19-28)	17 (14-21)	13 (10-17)	10 (7.4-14)	8.1 (5.5-12)	6.6 (4.2-9.9)	5.5 (3.4-8.6)	4.9 (2.9-8.0)	4.5 (2.5-7.4)	4.1 (2.3-6.9)
3	40 (33-47)	31 (25-37)	24 (19-30)	18 (14-25)	14 (10-21)	11 (7.4-17)	9.2 (5.6-15)	7.7 (4.5-13)	6.9 (3.8-12)	6.3 (3.3-11)	5.8 (2.9-10)
4	50 (42-57)	40 (32-46)	31 (24-38)	24 (19-31)	19 (15-26)	15 (11-22)	13 (8.7-19)	11 (6.9-17)	9.5 (5.8-15)	8.7 (5.0-14)	8.0 (4.5-13)
5	59 (54-64)	49 (44-54)	40 (35-46)	32 (27-38)	25 (21-32)	21 (17-27)	17 (14-22)	14 (11-20)	13 (9.6-18)	12 (8.4-17)	11 (7.5-16)
6	68	58	49	40	33	27	22	19	17	15	14

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	17	13	9.5	7.3	5.7	4.5	3.6	3.1	2.7	2.4	2.2
1	24 (20-29)	18 (15-22)	14 (11-17)	10 (8.4-13)	8.1 (6.3-9.9)	6.4 (4.8-7.7)	5.1 (3.8-6.1)	4.3 (3.1-5.1)	3.7 (2.6-4.4)	3.3 (2.3-3.9)	3.0 (2.0-3.6)
2	33 (27-41)	25 (20-32)	19 (15-25)	15 (11-20)	12 (8.5-15)	9.0 (6.4-12)	7.1 (4.9-9.7)	5.9 (4.0-8.2)	5.1 (3.3-7.2)	4.5 (2.9-6.3)	4.0 (2.5-5.7)
3	43 (35-52)	35 (27-43)	27 (20-35)	21 (15-28)	16 (11-22)	13 (8.6-18)	9.9 (6.6-14)	8.2 (5.3-12)	7.0 (4.4-11)	6.2 (3.8-9.5)	5.5 (3.3-8.5)
4	54 (45-61)	45 (36-53)	36 (28-44)	29 (22-35)	22 (17-29)	17 (13-23)	14 (9.8-19)	11 (7.9-16)	9.6 (6.6-14)	8.3 (5.6-12)	7.3 (4.9-11)
5	64 (56-69)	55 (48-61)	46 (39-52)	38 (31-44)	30 (24-36)	24 (19-29)	19 (15-23)	15 (12-20)	13 (10-17)	11 (9.0-15)	9.7 (7.9-13)
6	72	65	57	48	39	32	25	21	17	15	13

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

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	16	12	9.7	7.6	6.0	4.8	3.8	3.3	2.8	2.5	2.2
1	24 (19-41)	19 (14-32)	15 (11-25)	12 (8.5-20)	9.2 (6.6-15)	7.2 (5.1-11)	5.7 (4.0-8.5)	4.7 (3.3-6.8)	4.0 (2.8-5.4)	3.4 (2.4-4.4)	3.0 (2.1-3.7)
2	35 (25-51)	28 (19-42)	23 (15-34)	18 (11-27)	14 (8.9-21)	11 (6.9-17)	8.4 (5.4-13)	6.9 (4.4-10)	5.7 (3.6-8.2)	4.8 (3.1-6.7)	4.1 (2.6-5.6)
3	46 (32-60)	39 (26-52)	32 (20-44)	26 (16-36)	20 (12-29)	16 (9.3-23)	12 (7.2-18)	10 (5.9-15)	8.2 (4.9-12)	6.8 (4.1-9.9)	5.7 (3.5-8.3)
4	58 (41-68)	51 (34-61)	43 (27-53)	36 (22-45)	29 (17-37)	23 (13-30)	18 (10-24)	15 (8.5-19)	12 (7.0-16)	9.7 (5.9-13)	8.0 (5.1-11)
5	68 (50-74)	62 (43-69)	55 (36-62)	47 (29-54)	39 (23-46)	32 (19-38)	26 (15-31)	21 (12-25)	17 (10-21)	14 (8.9-17)	11 (7.7-14)
6	77	72	66	59	51	43	35	29	24	19	16

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	12	9.3	7.5	6.0	4.9	4.0	3.5	3.0	2.7	2.4
1	21 (16-36)	17 (13-30)	14 (10-24)	11 (8.1-19)	9.1 (6.4-15)	7.3 (5.1-12)	6.0 (4.1-9.6)	5.1 (3.5-7.8)	4.3 (3.0-6.4)	3.7 (2.5-5.3)	3.2 (2.2-4.4)
2	30 (21-46)	25 (17-39)	21 (14-32)	17 (11-26)	14 (8.7-21)	11 (6.9-17)	8.8 (5.6-14)	7.4 (4.7-11)	6.2 (3.9-9.3)	5.3 (3.3-7.7)	4.5 (2.8-6.4)
3	41 (27-55)	35 (22-48)	29 (18-41)	24 (15-34)	20 (12-28)	16 (9.4-23)	13 (7.6-19)	11 (6.3-15)	8.9 (5.3-13)	7.5 (4.5-11)	6.3 (3.8-8.9)
4	52 (34-63)	45 (29-56)	39 (24-50)	33 (19-43)	27 (16-36)	23 (13-30)	18 (10-24)	15 (8.7-20)	13 (7.3-17)	11 (6.2-14)	8.9 (5.3-12)
5	63 (43-69)	57 (37-63)	50 (31-57)	44 (26-50)	37 (21-43)	31 (17-37)	26 (14-31)	22 (12-26)	18 (10-22)	15 (8.7-19)	12 (7.5-16)
6	72	67	61	55	48	41	35	30	25	21	17

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

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	12	10	8.6	7.1	5.9	4.9	4.2	3.7	3.2	2.9	2.6
1	18 (13-31)	15 (11-26)	13 (9.0-21)	11 (7.4-18)	8.8 (6.1-15)	7.3 (5.0-12)	6.1 (4.2-9.9)	5.3 (3.6-8.4)	4.6 (3.1-7.1)	4.0 (2.7-6.0)	3.6 (2.4-5.1)
2	26 (18-39)	22 (15-34)	19 (12-29)	15 (9.9-24)	13 (8.2-20)	11 (6.7-16)	9.0 (5.6-14)	7.7 (4.8-12)	6.7 (4.2-10)	5.8 (3.6-8.5)	5.0 (3.1-7.2)
3	35 (23-48)	30 (19-42)	26 (16-37)	22 (13-32)	18 (11-27)	15 (9.1-22)	13 (7.6-19)	11 (6.5-16)	9.5 (5.6-14)	8.2 (4.8-12)	7.1 (4.2-9.9)
4	46 (29-56)	40 (25-51)	35 (21-45)	30 (18-39)	26 (15-34)	22 (12-29)	18 (10-24)	16 (9.0-21)	14 (7.7-18)	12 (6.6-15)	10 (5.7-13)
5	56 (37-63)	51 (32-58)	46 (28-52)	40 (23-47)	35 (20-41)	30 (17-35)	26 (14-31)	22 (12-27)	19 (11-23)	16 (9.2-20)	14 (8.0-17)
6	65	61	57	51	46	40	35	30	26	23	19

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	9.7	8.3	7.0	5.9	5.0	4.2	3.7	3.3	2.9	2.6	2.3
1	14 (10-24)	12 (8.6-20)	10 (7.2-17)	8.8 (6.1-15)	7.4 (5.1-12)	6.3 (4.3-10)	5.5 (3.7-8.9)	4.8 (3.3-7.7)	4.2 (2.9-6.7)	3.7 (2.5-5.8)	3.3 (2.2-5.1)
2	21 (14-31)	18 (11-27)	15 (9.7-23)	13 (8.2-20)	11 (6.9-17)	9.3 (5.8-14)	8.1 (5.0-12)	7.1 (4.4-11)	6.2 (3.9-9.5)	5.4 (3.4-8.2)	4.8 (3.0-7.2)
3	28 (18-39)	25 (15-35)	21 (13-31)	19 (11-27)	16 (9.4-23)	13 (7.9-20)	12 (6.9-17)	10 (6.0-15)	9.0 (5.2-13)	7.9 (4.6-11)	6.9 (4.0-9.9)
4	38 (23-47)	33 (20-43)	30 (17-38)	26 (15-34)	22 (13-29)	19 (11-26)	17 (9.4-22)	15 (8.2-20)	13 (7.3-17)	11 (6.4-15)	9.9 (5.6-13)
5	47 (30-54)	43 (26-50)	39 (23-45)	35 (20-41)	31 (17-36)	27 (15-32)	24 (13-28)	21 (11-25)	18 (9.9-22)	16 (8.8-20)	14 (7.7-18)
6	57	53	49	45	40	36	32	29	26	23	20