

Finland - 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 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	12	6.2	3.2	1.6	0.8	0.4	0.2	0.1	0.1	0.0	0.0
1	18 (12-24)	9.8 (6.5-13)	5.1 (3.4-6.7)	2.6 (1.7-3.5)	1.4 (0.9-1.8)	0.7 (0.5-0.9)	0.4 (0.2-0.5)	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	28 (17-40)	15 (9.1-23)	8.1 (4.7-12)	4.2 (2.4-6.4)	2.2 (1.3-3.3)	1.1 (0.6-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	40 (25-58)	23 (14-36)	13 (7.2-20)	6.7 (3.7-11)	3.5 (1.9-5.7)	1.8 (1.0-3.0)	0.9 (0.5-1.5)	0.5 (0.3-0.8)	0.3 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	55 (39-73)	34 (22-49)	19 (12-29)	10 (6.4-16)	5.4 (3.3-8.6)	2.8 (1.7-4.5)	1.4 (0.9-2.3)	0.7 (0.5-1.2)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	71 (60-84)	47 (38-62)	28 (22-39)	16 (12-22)	8.3 (6.1-12)	4.3 (3.2-6.3)	2.2 (1.6-3.3)	1.2 (0.8-1.7)	0.6 (0.5-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
6	85	63	40	23	13	6.6	3.4	1.8	1.0	0.5	0.3

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	11	6.0	3.3	1.8	1.0	0.5	0.3	0.2	0.1	0.1	0.0
1	17 (11-20)	9.4 (6.3-12)	5.2 (3.4-6.4)	2.8 (1.9-3.5)	1.5 (1.0-1.9)	0.8 (0.5-1.0)	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	25 (16-35)	14 (8.9-21)	8.1 (4.9-12)	4.4 (2.6-6.4)	2.4 (1.4-3.5)	1.3 (0.8-1.9)	0.7 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	36 (23-52)	22 (13-33)	12 (7.3-19)	6.8 (4.0-11)	3.7 (2.2-6.0)	2.0 (1.2-3.2)	1.1 (0.6-1.8)	0.6 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	50 (37-67)	32 (22-45)	19 (12-28)	10 (6.8-16)	5.8 (3.7-9.0)	3.1 (2.0-4.9)	1.7 (1.1-2.7)	0.9 (0.6-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
5	65 (57-79)	44 (37-57)	27 (22-37)	16 (12-22)	8.8 (6.9-12)	4.8 (3.7-6.9)	2.6 (2.0-3.8)	1.4 (1.1-2.1)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.2 (0.2-0.4)
6	80	59	38	23	13	7.3	4.0	2.2	1.2	0.7	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	11	6.3	3.5	2.0	1.1	0.6	0.4	0.2	0.1	0.1	0.0
1	17 (11-19)	9.6 (6.6-11)	5.5 (3.7-6.5)	3.1 (2.1-3.7)	1.7 (1.2-2.1)	1.0 (0.7-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	24 (16-32)	15 (9.2-20)	8.4 (5.2-11)	4.8 (2.9-6.6)	2.7 (1.7-3.7)	1.5 (0.9-2.1)	0.9 (0.5-1.2)	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	35 (23-48)	21 (14-31)	13 (7.9-19)	7.3 (4.5-11)	4.1 (2.5-6.3)	2.3 (1.4-3.6)	1.3 (0.8-2.0)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
4	48 (36-63)	31 (22-43)	19 (13-27)	11 (7.6-16)	6.2 (4.3-9.5)	3.5 (2.4-5.4)	2.0 (1.4-3.1)	1.2 (0.8-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
5	62 (56-75)	43 (37-55)	27 (23-36)	16 (13-22)	9.4 (7.7-13)	5.3 (4.3-7.6)	3.1 (2.5-4.4)	1.8 (1.4-2.5)	1.0 (0.8-1.5)	0.6 (0.5-0.9)	0.3 (0.3-0.5)
6	76	57	38	23	14	7.9	4.6	2.7	1.6	0.9	0.5

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	13	7.6	4.5	2.6	1.5	0.9	0.5	0.3	0.2	0.1	0.1
1	19 (13-22)	11 (7.9-13)	6.8 (4.7-8.1)	4.0 (2.7-4.8)	2.3 (1.6-2.8)	1.4 (0.9-1.6)	0.8 (0.6-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	27 (18-34)	17 (11-22)	10 (6.6-13)	6.0 (3.9-7.9)	3.5 (2.3-4.7)	2.1 (1.3-2.7)	1.2 (0.8-1.7)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	37 (27-49)	24 (16-33)	15 (9.9-21)	9.0 (5.8-13)	5.3 (3.4-7.7)	3.1 (2.0-4.6)	1.9 (1.2-2.8)	1.1 (0.7-1.7)	0.7 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
4	50 (40-64)	34 (26-46)	22 (16-30)	13 (9.6-19)	7.9 (5.7-12)	4.7 (3.3-6.9)	2.8 (2.0-4.2)	1.7 (1.2-2.5)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.3-0.6)
5	63 (57-75)	46 (40-57)	30 (26-40)	19 (16-26)	12 (9.5-16)	6.9 (5.6-9.6)	4.2 (3.4-5.9)	2.6 (2.1-3.6)	1.5 (1.3-2.2)	0.9 (0.8-1.3)	0.6 (0.5-0.8)
6	76	59	41	27	17	10	6.2	3.8	2.3	1.4	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	16	9.9	6.1	3.7	2.3	1.4	0.9	0.6	0.4	0.2	0.1
1	25 (22-31)	16 (14-20)	10 (8.6-13)	6.2 (5.3-7.8)	3.8 (3.2-4.8)	2.4 (2.0-3.0)	1.5 (1.3-1.9)	0.9 (0.8-1.2)	0.6 (0.5-0.7)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
2	37 (31-47)	25 (20-33)	16 (13-22)	10 (7.9-14)	6.3 (4.9-8.6)	3.9 (3.0-5.4)	2.5 (1.9-3.4)	1.6 (1.2-2.2)	1.0 (0.8-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.5)
3	53 (43-62)	38 (29-47)	25 (19-33)	16 (12-22)	10 (7.4-14)	6.5 (4.6-8.8)	4.1 (2.9-5.6)	2.6 (1.9-3.6)	1.7 (1.2-2.3)	1.0 (0.7-1.4)	0.7 (0.5-0.9)
4	69 (59-75)	53 (43-61)	38 (29-45)	26 (19-31)	17 (12-20)	11 (7.7-13)	6.8 (4.9-8.6)	4.3 (3.1-5.5)	2.7 (2.0-3.5)	1.7 (1.2-2.2)	1.1 (0.8-1.4)
5	81 (75-84)	69 (61-73)	53 (45-58)	38 (31-43)	26 (21-29)	17 (13-19)	11 (8.6-13)	7.1 (5.5-8.2)	4.5 (3.5-5.3)	2.9 (2.2-3.4)	1.8 (1.4-2.1)
6	88	81	69	54	38	26	18	11	7.4	4.7	3.0

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	18	12	7.9	5.1	3.2	2.1	1.4	0.9	0.6	0.4	0.3
1	31 (25-56)	22 (17-42)	15 (11-30)	9.8 (7.1-20)	6.4 (4.6-13)	4.2 (3.0-9.0)	2.8 (2.0-6.0)	1.9 (1.3-4.0)	1.2 (0.9-2.6)	0.8 (0.6-1.7)	0.5 (0.4-1.1)
2	48 (33-71)	36 (23-59)	26 (15-45)	18 (10-32)	12 (6.5-22)	7.9 (4.3-15)	5.3 (2.8-10)	3.5 (1.9-7.0)	2.3 (1.2-4.7)	1.6 (0.8-3.1)	1.0 (0.5-2.1)
3	64 (45-81)	52 (32-71)	40 (22-58)	29 (15-45)	20 (9.7-32)	14 (6.5-23)	9.5 (4.3-16)	6.4 (2.8-11)	4.3 (1.9-7.5)	2.9 (1.2-5.0)	1.9 (0.8-3.3)
4	77 (59-86)	68 (45-79)	56 (33-70)	44 (23-57)	32 (15-44)	23 (10-33)	16 (6.9-23)	11 (4.6-16)	7.6 (3.1-11)	5.1 (2.0-7.5)	3.4 (1.3-5.0)
5	85 (72-89)	80 (61-85)	72 (48-78)	61 (35-68)	48 (25-55)	36 (17-42)	26 (12-31)	19 (8.0-22)	13 (5.4-15)	8.7 (3.6-11)	5.9 (2.4-7.1)
6	90	87	83	76	65	53	41	30	21	15	10

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	18	13	8.7	5.9	4.0	2.8	2.0	1.4	0.9	0.7	0.4
1	30 (23-54)	22 (16-42)	16 (11-32)	11 (7.7-23)	7.7 (5.3-16)	5.4 (3.7-12)	3.8 (2.6-8.2)	2.7 (1.8-5.8)	1.9 (1.2-4.0)	1.3 (0.9-2.8)	0.9 (0.6-1.9)
2	45 (31-67)	35 (22-57)	26 (16-45)	19 (11-35)	14 (7.4-26)	9.8 (5.2-19)	7.0 (3.6-14)	4.9 (2.5-9.7)	3.4 (1.8-6.9)	2.4 (1.2-4.8)	1.7 (0.8-3.4)
3	59 (41-76)	49 (31-68)	39 (22-57)	30 (16-46)	22 (11-35)	17 (7.8-27)	12 (5.5-20)	8.6 (3.8-14)	6.1 (2.7-10)	4.3 (1.8-7.4)	3.0 (1.3-5.2)
4	71 (53-82)	63 (42-76)	54 (32-67)	44 (23-57)	34 (16-46)	26 (12-37)	20 (8.5-28)	14 (6.0-21)	10 (4.2-15)	7.3 (2.9-11)	5.2 (2.0-7.8)
5	80 (64-85)	75 (55-80)	68 (44-74)	58 (34-66)	48 (25-56)	39 (19-46)	30 (14-37)	23 (9.8-28)	17 (7.0-21)	12 (4.9-15)	8.6 (3.5-11)
6	86	83	79	72	63	54	44	34	26	19	14

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	15	11	8.0	5.7	4.2	3.1	2.3	1.7	1.2	0.9	0.7
1	25 (19-47)	19 (14-37)	14 (10-29)	11 (7.5-22)	7.9 (5.5-17)	5.9 (4.1-13)	4.4 (3.0-9.5)	3.2 (2.2-7.1)	2.4 (1.6-5.2)	1.8 (1.2-3.9)	1.3 (0.9-2.8)
2	37 (26-58)	30 (19-49)	23 (14-40)	18 (10-32)	14 (7.7-25)	10 (5.7-19)	7.8 (4.2-15)	5.8 (3.1-11)	4.3 (2.3-8.5)	3.2 (1.7-6.3)	2.4 (1.2-4.7)
3	51 (33-68)	43 (26-60)	35 (20-51)	28 (15-42)	22 (11-34)	17 (8.3-27)	13 (6.2-21)	9.9 (4.6-17)	7.5 (3.4-13)	5.6 (2.5-9.4)	4.1 (1.9-7.0)
4	63 (44-75)	56 (35-68)	48 (28-61)	40 (21-52)	33 (16-44)	26 (12-36)	21 (9.3-29)	16 (7.0-23)	12 (5.2-18)	9.3 (3.8-13)	7.0 (2.8-10)
5	74 (55-79)	68 (46-74)	61 (38-67)	53 (30-60)	46 (24-52)	38 (18-44)	31 (14-37)	25 (11-30)	19 (8.1-24)	15 (6.1-18)	11 (4.6-14)
6	81	78	73	66	59	52	44	36	29	23	18

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	10	7.9	6.0	4.5	3.6	2.8	2.2	1.7	1.3	1.0	0.8
1	18 (13-35)	14 (10-28)	11 (7.7-22)	8.4 (5.9-18)	6.6 (4.7-14)	5.2 (3.6-11)	4.1 (2.8-9.0)	3.2 (2.2-7.1)	2.5 (1.7-5.5)	1.9 (1.3-4.3)	1.5 (1.0-3.4)
2	28 (18-46)	22 (14-38)	18 (11-31)	14 (8.2-25)	11 (6.5-21)	9.1 (5.1-17)	7.2 (4.0-14)	5.7 (3.1-11)	4.5 (2.4-8.6)	3.5 (1.9-6.8)	2.7 (1.5-5.3)
3	39 (24-56)	33 (19-49)	27 (15-42)	22 (11-35)	18 (9.1-29)	15 (7.2-24)	12 (5.7-20)	9.6 (4.4-16)	7.6 (3.5-13)	6.0 (2.7-10)	4.7 (2.1-8.0)
4	52 (32-64)	45 (26-58)	39 (21-51)	33 (17-44)	28 (13-37)	23 (11-31)	19 (8.4-26)	15 (6.7-21)	12 (5.2-17)	9.8 (4.1-14)	7.8 (3.2-11)
5	64 (42-70)	58 (35-64)	52 (29-58)	45 (23-51)	39 (19-45)	34 (16-39)	28 (13-33)	23 (10-28)	19 (8.0-23)	16 (6.3-19)	12 (5.0-15)
6	73	69	64	58	52	46	40	34	28	24	19