

Finland - The probabilities of a major osteoporotic fracture in women

The following tables give the 10-year probability (%) of a major osteoporotic fracture (hip, clinical spine, forearm or proximal humerus fracture) according to body mass index (BMI kg/m²), 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.

Age = 50 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.0	2.7	2.5	2.2	1.9	1.7	1.5
1	4.9 (3.4-7.3)	4.3 (2.9-6.1)	3.9 (2.7-5.4)	3.4 (2.3-4.7)	3.0 (2.0-4.1)	2.6 (1.8-3.6)	2.3 (1.5-3.1)
2	7.9 (4.3-13)	6.7 (3.6-11)	6.1 (3.2-10)	5.3 (2.8-9.1)	4.6 (2.4-7.9)	4.0 (2.1-7.0)	3.5 (1.8-6.1)
3	13 (6.4-21)	10 (5.2-18)	9.3 (4.5-17)	8.1 (3.9-15)	7.0 (3.4-13)	6.1 (2.9-11)	5.3 (2.5-9.9)
4	20 (11-30)	16 (9.0-25)	14 (7.6-22)	12 (6.5-20)	11 (5.6-17)	9.2 (4.9-15)	8.0 (4.2-13)
5	30 (19-37)	24 (16-31)	21 (14-27)	18 (12-24)	16 (11-21)	14 (9.2-18)	12 (8.0-16)
6	44	35	30	26	23	20	17

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.9	3.4	3.1	2.7	2.4	2.1	1.8
1	6.3 (4.5-9.2)	5.4 (3.8-7.5)	4.9 (3.4-6.6)	4.2 (2.9-5.8)	3.7 (2.5-5.0)	3.2 (2.2-4.3)	2.8 (1.9-3.8)
2	10 (5.9-16)	8.5 (4.7-14)	7.5 (4.1-12)	6.6 (3.6-11)	5.7 (3.1-9.6)	5.0 (2.7-8.4)	4.3 (2.3-7.3)
3	16 (8.8-26)	13 (6.9-22)	11 (5.8-20)	9.9 (5.0-18)	8.6 (4.3-15)	7.5 (3.7-14)	6.5 (3.2-12)
4	25 (14-36)	20 (12-30)	17 (9.9-27)	15 (8.4-24)	13 (7.2-21)	11 (6.2-18)	9.8 (5.4-16)
5	37 (24-45)	29 (20-37)	25 (17-32)	22 (15-28)	19 (13-25)	16 (11-22)	14 (10-19)
6	52	42	36	31	27	24	21

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.0	4.2	3.8	3.3	2.8	2.5	2.1
1	8.1 (5.9-11)	6.7 (4.8-9.0)	5.9 (4.1-7.8)	5.1 (3.5-6.7)	4.4 (3.1-5.8)	3.8 (2.6-5.0)	3.3 (2.3-4.4)
2	13 (7.9-20)	10 (6.1-16)	9.0 (5.1-14)	7.8 (4.4-13)	6.8 (3.8-11)	5.8 (3.2-9.6)	5.1 (2.8-8.4)
3	20 (12-30)	16 (9.1-26)	14 (7.3-23)	12 (6.2-20)	10 (5.3-18)	8.8 (4.6-15)	7.6 (3.9-13)
4	30 (19-42)	24 (15-35)	20 (13-31)	18 (11-27)	15 (9.1-24)	13 (7.7-21)	11 (6.6-18)
5	44 (31-52)	35 (25-43)	29 (21-37)	25 (18-33)	22 (16-29)	19 (14-25)	17 (12-22)
6	60	49	41	36	31	27	24

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.6	6.2	5.5	4.7	4.1	3.5	3.0
1	12 (9.1-16)	9.7 (7.2-13)	8.4 (6.0-11)	7.3 (5.2-9.3)	6.3 (4.4-8.0)	5.4 (3.8-6.9)	4.7 (3.3-6.0)
2	19 (12-27)	15 (9.4-21)	13 (7.7-19)	11 (6.5-17)	9.5 (5.5-15)	8.2 (4.7-13)	7.1 (4.0-11)
3	28 (19-39)	22 (14-34)	19 (11-30)	16 (9.4-27)	14 (7.9-23)	12 (6.7-20)	11 (5.7-18)
4	40 (28-53)	33 (22-45)	28 (19-40)	24 (16-35)	21 (13-31)	18 (11-27)	15 (9.6-24)
5	55 (44-63)	46 (36-54)	39 (30-48)	34 (26-42)	30 (22-37)	26 (19-33)	22 (17-29)
6	70	61	53	47	41	36	31

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	12	9.3	7.9	6.7	5.7	4.9	4.2
1	18 (14-22)	14 (11-18)	12 (8.9-15)	10 (7.5-13)	8.5 (6.4-11)	7.3 (5.4-9.3)	6.2 (4.6-8.0)
2	28 (19-37)	22 (15-29)	18 (11-24)	15 (9.6-21)	13 (8.1-18)	11 (6.8-15)	9.2 (5.8-13)
3	41 (29-55)	32 (22-45)	26 (17-38)	22 (14-32)	19 (12-28)	16 (9.9-24)	13 (8.4-20)
4	57 (45-70)	46 (36-60)	38 (28-51)	32 (24-44)	27 (20-39)	23 (17-33)	20 (14-29)
5	71 (66-79)	62 (56-71)	52 (45-61)	45 (39-54)	39 (33-48)	34 (28-41)	29 (23-36)
6	81	77	68	61	54	47	41

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	16	13	11	9.0	7.6	6.4	5.5
1	26 (19-37)	20 (15-28)	16 (12-20)	14 (10-17)	11 (8.5-14)	9.6 (7.1-12)	8.1 (6.0-9.8)
2	39 (26-55)	32 (21-44)	25 (16-34)	21 (13-28)	17 (11-24)	15 (9.3-20)	12 (7.7-16)
3	54 (39-70)	46 (31-61)	37 (24-51)	31 (20-44)	26 (17-38)	22 (14-32)	18 (11-27)
4	68 (53-79)	62 (46-75)	52 (38-67)	45 (32-60)	39 (27-52)	33 (22-45)	27 (18-38)
5	79 (68-84)	75 (63-82)	69 (56-77)	62 (49-71)	54 (42-64)	47 (36-56)	40 (31-49)
6	85	84	81	76	70	63	56

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	20	17	15	12	10	8.5	7.2
1	30 (22-43)	25 (19-35)	21 (16-28)	18 (13-23)	15 (11-19)	13 (9.2-16)	10 (7.6-13)
2	42 (30-58)	37 (25-50)	31 (21-42)	26 (18-35)	22 (15-29)	18 (12-24)	15 (9.9-20)
3	55 (40-69)	50 (36-64)	44 (31-57)	37 (26-49)	32 (22-42)	27 (18-36)	22 (15-30)
4	67 (52-77)	63 (48-74)	58 (44-70)	51 (38-63)	44 (32-56)	37 (26-49)	32 (22-42)
5	76 (65-82)	74 (62-80)	70 (58-78)	64 (51-72)	57 (44-66)	50 (38-59)	43 (33-52)
6	82	82	80	75	70	63	57

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	20	18	17	15	12	10	8.5
1	30 (22-43)	27 (20-37)	25 (18-32)	21 (15-27)	17 (13-22)	14 (10-18)	12 (8.6-15)
2	41 (29-57)	38 (26-51)	35 (24-45)	29 (20-39)	25 (16-33)	20 (13-27)	17 (11-23)
3	53 (39-67)	50 (35-63)	46 (33-59)	40 (27-52)	34 (23-45)	29 (19-39)	24 (15-33)
4	65 (50-75)	61 (47-72)	58 (45-69)	52 (38-63)	45 (32-57)	39 (27-50)	33 (22-43)
5	73 (62-78)	72 (60-78)	69 (57-76)	63 (51-72)	57 (45-66)	50 (38-59)	44 (33-53)
6	77	78	78	74	68	62	56

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	17	16	16	13	11	9.0	7.5
1	26 (19-38)	24 (17-33)	22 (16-29)	19 (13-24)	15 (11-20)	13 (9.0-16)	11 (7.4-13)
2	36 (25-51)	33 (23-47)	31 (21-42)	26 (18-35)	22 (14-30)	18 (12-25)	15 (9.6-21)
3	48 (34-62)	45 (31-58)	42 (29-55)	36 (24-48)	30 (20-41)	25 (16-35)	21 (13-29)
4	58 (44-69)	56 (42-67)	53 (40-64)	47 (34-58)	41 (28-52)	35 (23-45)	29 (19-39)
5	66 (56-71)	66 (54-73)	64 (52-72)	58 (46-67)	52 (40-61)	45 (34-54)	39 (29-48)
6	69	72	73	68	63	57	50