

Estonia - 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 Estonia. 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	2.2	1.9	1.8	1.5	1.3	1.2	1.0
1	3.6 (2.5-5.5)	3.1 (2.1-4.5)	2.8 (1.9-3.9)	2.4 (1.6-3.4)	2.1 (1.4-2.9)	1.8 (1.2-2.5)	1.6 (1.1-2.2)
2	5.9 (3.2-9.9)	4.9 (2.6-8.1)	4.4 (2.3-7.4)	3.8 (2.0-6.5)	3.3 (1.7-5.7)	2.9 (1.5-4.9)	2.5 (1.3-4.3)
3	9.6 (4.9-16)	7.8 (3.8-14)	6.8 (3.3-12)	5.8 (2.8-11)	5.1 (2.4-9.3)	4.4 (2.1-8.1)	3.8 (1.8-7.1)
4	15 (8.1-23)	12 (6.8-19)	10 (5.6-17)	8.9 (4.8-14)	7.7 (4.1-13)	6.6 (3.5-11)	5.8 (3.0-9.6)
5	24 (14-30)	19 (12-24)	15 (10-20)	13 (8.8-18)	12 (7.6-15)	9.9 (6.6-13)	8.6 (5.7-12)
6	36	28	23	20	17	15	13

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.3	2.9	2.7	2.3	2.0	1.8	1.5
1	5.5 (3.9-7.9)	4.6 (3.2-6.5)	4.2 (2.9-5.7)	3.6 (2.5-4.9)	3.2 (2.2-4.3)	2.7 (1.9-3.7)	2.4 (1.6-3.2)
2	8.8 (5.1-14)	7.3 (4.1-12)	6.5 (3.5-11)	5.6 (3.0-9.4)	4.9 (2.6-8.2)	4.2 (2.3-7.2)	3.7 (2.0-6.3)
3	14 (7.7-22)	11 (5.9-19)	9.9 (5.0-17)	8.6 (4.3-15)	7.4 (3.7-13)	6.4 (3.2-12)	5.6 (2.7-10)
4	22 (12-32)	17 (10-26)	15 (8.5-23)	13 (7.3-20)	11 (6.2-18)	9.6 (5.3-16)	8.4 (4.6-14)
5	33 (21-40)	26 (17-33)	22 (15-28)	19 (13-25)	16 (11-22)	14 (9.8-19)	12 (8.5-16)
6	47	38	31	27	24	21	18

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.6	3.9	3.6	3.1	2.7	2.3	2.0
1	7.4 (5.4-10)	6.2 (4.4-8.4)	5.5 (3.9-7.4)	4.8 (3.3-6.3)	4.2 (2.9-5.5)	3.6 (2.5-4.8)	3.1 (2.1-4.1)
2	12 (7.2-18)	9.7 (5.7-15)	8.5 (4.8-14)	7.4 (4.1-12)	6.4 (3.5-10)	5.5 (3.0-9.1)	4.8 (2.6-7.9)
3	18 (11-28)	15 (8.4-24)	13 (6.8-22)	11 (5.8-19)	9.6 (5.0-17)	8.3 (4.3-15)	7.2 (3.7-13)
4	28 (17-39)	22 (14-33)	19 (12-29)	16 (9.9-26)	14 (8.4-22)	12 (7.2-20)	11 (6.1-17)
5	40 (29-48)	33 (23-40)	28 (20-35)	24 (17-31)	21 (15-27)	18 (13-24)	16 (11-21)
6	56	46	39	34	30	26	22

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.1	5.0	4.4	3.8	3.3	2.8	2.4
1	9.7 (7.3-13)	7.9 (5.8-10)	6.8 (4.9-8.8)	5.9 (4.2-7.6)	5.0 (3.5-6.5)	4.3 (3.0-5.6)	3.7 (2.6-4.8)
2	15 (9.9-22)	12 (7.6-18)	10 (6.2-16)	8.9 (5.2-14)	7.7 (4.4-12)	6.6 (3.8-10)	5.7 (3.2-9.1)
3	23 (15-32)	18 (11-28)	16 (9.0-25)	13 (7.6-22)	11 (6.4-19)	9.9 (5.4-17)	8.5 (4.6-15)
4	34 (23-45)	27 (18-38)	23 (15-34)	20 (13-29)	17 (11-26)	15 (9.1-22)	13 (7.7-20)
5	47 (36-55)	39 (29-47)	33 (25-41)	28 (21-36)	24 (18-31)	21 (16-27)	18 (14-24)
6	62	53	45	39	34	30	26

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.9	6.3	5.3	4.5	3.8	3.3	2.8
1	13 (9.6-15)	9.8 (7.4-12)	8.0 (6.0-10)	6.8 (5.0-8.6)	5.7 (4.3-7.3)	4.9 (3.6-6.3)	4.2 (3.0-5.4)
2	20 (13-27)	15 (9.9-21)	12 (7.8-17)	10 (6.5-14)	8.6 (5.5-12)	7.3 (4.6-10)	6.2 (3.9-8.7)
3	30 (21-41)	23 (15-33)	18 (12-27)	15 (9.7-23)	13 (8.1-20)	11 (6.7-17)	9.2 (5.6-14)
4	44 (33-57)	35 (26-47)	27 (20-38)	23 (16-33)	19 (14-28)	16 (11-24)	14 (9.4-20)
5	59 (53-68)	49 (43-58)	40 (33-48)	34 (28-41)	28 (23-35)	24 (19-30)	20 (16-26)
6	72	65	55	48	41	35	30

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	10	7.9	6.5	5.4	4.6	3.8	3.2
1	17 (12-25)	13 (9.5-18)	10 (7.5-13)	8.4 (6.2-11)	7.0 (5.2-8.6)	5.8 (4.3-7.0)	4.9 (3.6-5.9)
2	27 (17-40)	21 (13-30)	16 (10-22)	13 (8.3-18)	11 (6.8-15)	9.0 (5.6-12)	7.4 (4.7-10)
3	40 (26-55)	32 (20-46)	25 (15-36)	21 (13-30)	17 (10-25)	14 (8.5-21)	11 (7.0-17)
4	54 (38-68)	47 (32-61)	38 (25-51)	31 (21-44)	26 (17-37)	22 (14-31)	18 (11-26)
5	67 (54-76)	62 (48-71)	53 (40-63)	46 (34-55)	39 (28-48)	33 (24-41)	27 (20-34)
6	77	75	70	62	55	47	40

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	11	9.9	8.3	6.9	5.8	4.8
1	21 (15-32)	18 (13-26)	15 (11-20)	12 (9.1-16)	10 (7.5-13)	8.5 (6.2-11)	7.0 (5.1-8.6)
2	31 (21-46)	27 (18-38)	22 (15-31)	19 (12-25)	15 (9.9-21)	13 (8.1-17)	10 (6.7-14)
3	43 (29-57)	38 (26-51)	33 (22-44)	27 (18-37)	23 (15-31)	19 (12-26)	15 (10-21)
4	55 (39-67)	51 (36-63)	45 (33-58)	39 (27-51)	33 (22-44)	27 (18-37)	23 (15-31)
5	66 (52-73)	63 (49-71)	59 (45-68)	52 (39-61)	45 (33-54)	38 (28-47)	32 (23-40)
6	75	73	71	65	58	51	44

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	17	15	14	12	10	8.4	7.0
1	25 (18-36)	23 (17-32)	21 (15-27)	17 (13-22)	14 (10-18)	12 (8.6-15)	10 (7.1-12)
2	35 (24-50)	32 (22-45)	29 (20-39)	25 (17-33)	21 (14-28)	17 (11-23)	14 (9.2-19)
3	46 (31-60)	43 (29-57)	40 (28-52)	34 (23-45)	29 (19-39)	24 (16-33)	20 (13-28)
4	57 (42-68)	55 (40-66)	52 (39-63)	45 (33-57)	39 (27-50)	33 (23-44)	28 (19-38)
5	67 (54-74)	65 (52-73)	63 (51-71)	57 (45-66)	51 (39-60)	44 (33-53)	38 (28-46)
6	74	74	73	67	62	55	49

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	17	15	15	12	10	8.4	7.0
1	25 (18-37)	23 (17-32)	21 (16-28)	18 (13-23)	15 (10-19)	12 (8.6-15)	10 (7.1-12)
2	35 (24-50)	32 (22-45)	30 (20-40)	25 (17-34)	21 (14-28)	17 (11-24)	14 (9.2-19)
3	47 (32-61)	44 (30-57)	41 (28-53)	35 (23-46)	29 (19-40)	24 (16-34)	20 (13-28)
4	58 (43-69)	55 (41-66)	52 (39-64)	46 (33-57)	39 (27-51)	33 (23-44)	28 (19-38)
5	67 (55-73)	66 (53-73)	64 (51-71)	57 (45-66)	51 (39-60)	44 (33-53)	38 (28-47)
6	72	73	73	68	62	56	49