

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 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 Estonia. 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	13	7.9	5.2	3.7	2.8	2.2	1.9	1.7	1.6	1.5	1.4
1	20 (16-25)	12 (11-16)	8.0 (7.0-10)	5.6 (4.5-7.1)	4.2 (3.2-5.3)	3.4 (2.4-4.3)	2.8 (1.9-3.7)	2.5 (1.7-3.4)	2.4 (1.5-3.3)	2.3 (1.5-3.2)	2.2 (1.4-3.0)
2	29 (22-40)	18 (15-26)	12 (9.4-17)	8.5 (6.1-12)	6.4 (4.1-9.6)	5.0 (3.0-8.1)	4.2 (2.3-6.9)	3.7 (2.0-6.4)	3.5 (1.8-6.1)	3.3 (1.7-5.8)	3.2 (1.6-5.6)
3	41 (29-56)	27 (19-36)	18 (13-25)	13 (8.3-19)	9.4 (5.6-15)	7.4 (4.0-13)	6.1 (3.1-11)	5.5 (2.6-10)	5.1 (2.4-9.8)	4.9 (2.2-9.4)	4.7 (2.1-9.0)
4	56 (40-70)	38 (26-48)	26 (17-32)	18 (12-25)	14 (8.9-20)	11 (6.8-17)	8.8 (5.2-14)	7.8 (4.3-13)	7.3 (3.9-12)	7.0 (3.6-12)	6.7 (3.4-12)
5	71 (60-81)	52 (42-60)	36 (28-41)	26 (20-30)	19 (15-24)	15 (12-20)	12 (9.4-17)	11 (8.1-15)	10 (7.3-15)	9.8 (6.8-14)	9.4 (6.4-13)
6	84	67	49	36	27	21	17	15	14	14	13

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

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	14	9.5	6.6	4.9	3.8	3.1	2.6	2.4	2.2	2.1	2.0
1	21 (19-26)	14 (13-17)	10 (8.5-12)	7.4 (5.9-9.0)	5.8 (4.3-7.2)	4.7 (3.3-6.1)	3.9 (2.7-5.2)	3.6 (2.4-4.9)	3.3 (2.2-4.6)	3.1 (2.0-4.4)	3.0 (1.9-4.2)
2	31 (25-41)	21 (17-28)	15 (11-20)	11 (7.8-15)	8.5 (5.5-13)	6.9 (4.1-11)	5.7 (3.3-9.3)	5.2 (2.9-8.7)	4.9 (2.6-8.2)	4.6 (2.4-7.8)	4.3 (2.3-7.4)
3	43 (33-54)	30 (23-39)	22 (15-30)	16 (10-24)	12 (7.3-20)	10 (5.5-17)	8.3 (4.3-15)	7.6 (3.7-14)	7.0 (3.4-13)	6.6 (3.1-12)	6.3 (2.9-12)
4	57 (43-68)	42 (30-49)	30 (21-38)	23 (16-31)	18 (12-26)	14 (9.1-22)	12 (7.1-19)	11 (6.1-18)	10 (5.5-17)	9.4 (5.0-16)	8.9 (4.7-15)
5	71 (63-79)	55 (46-61)	41 (34-46)	31 (25-37)	24 (19-31)	20 (16-26)	16 (13-22)	15 (11-21)	14 (9.8-19)	13 (9.0-18)	12 (8.4-18)
6	84	69	54	42	33	27	22	20	19	18	17

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	15	11	7.8	5.9	4.6	3.7	3.2	2.9	2.7	2.5	2.3
1	23 (21-26)	16 (14-18)	12 (9.6-13)	8.7 (6.9-10)	6.9 (5.1-8.6)	5.5 (4.0-7.3)	4.7 (3.3-6.4)	4.3 (2.9-5.9)	4.0 (2.6-5.5)	3.7 (2.4-5.2)	3.4 (2.2-4.8)
2	32 (27-41)	23 (19-30)	17 (13-22)	13 (9.0-18)	10 (6.5-15)	8.1 (4.9-12)	6.9 (4.0-11)	6.3 (3.5-10)	5.8 (3.1-9.5)	5.3 (2.8-8.9)	5.0 (2.6-8.4)
3	44 (35-53)	32 (25-42)	24 (17-34)	18 (12-28)	14 (8.7-23)	12 (6.5-20)	9.9 (5.3-17)	9.0 (4.6-16)	8.2 (4.1-15)	7.7 (3.7-14)	7.1 (3.4-13)
4	57 (45-65)	44 (33-51)	33 (24-42)	25 (18-35)	20 (14-29)	16 (11-25)	14 (8.6-22)	13 (7.4-20)	12 (6.6-19)	11 (5.9-18)	10 (5.5-17)
5	71 (64-76)	56 (49-61)	44 (37-50)	34 (29-41)	27 (23-34)	22 (18-29)	19 (15-26)	17 (13-24)	16 (11-22)	15 (10-21)	14 (9.5-20)
6	82	69	56	45	36	30	26	23	22	20	19

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

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	17	12	8.7	6.6	5.1	4.1	3.5	3.2	2.8	2.6	2.4
1	24 (22-27)	17 (15-19)	13 (11-14)	9.6 (7.7-11)	7.5 (5.7-9.4)	6.0 (4.3-7.8)	5.2 (3.6-7.0)	4.6 (3.2-6.4)	4.2 (2.8-5.8)	3.8 (2.5-5.4)	3.5 (2.3-5.0)
2	33 (29-41)	24 (20-30)	18 (14-23)	14 (10-19)	11 (7.3-15)	8.6 (5.5-13)	7.5 (4.5-12)	6.7 (3.8-11)	6.1 (3.4-9.8)	5.5 (3.0-9.1)	5.1 (2.7-8.4)
3	45 (37-53)	34 (27-43)	25 (19-35)	19 (13-29)	15 (9.7-24)	12 (7.3-20)	11 (5.9-18)	9.5 (5.0-17)	8.6 (4.4-15)	7.9 (3.9-14)	7.2 (3.5-13)
4	57 (46-63)	45 (35-53)	34 (26-43)	27 (20-36)	21 (16-30)	17 (12-25)	15 (9.6-23)	13 (8.1-21)	12 (7.1-19)	11 (6.3-18)	10 (5.7-17)
5	69 (64-74)	57 (51-62)	45 (40-51)	36 (31-43)	29 (24-36)	23 (19-30)	20 (16-27)	18 (13-25)	16 (12-23)	15 (10-21)	14 (9.5-19)
6	80	69	57	46	38	31	27	24	22	20	19

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	9.3	7.0	5.3	4.3	3.7	3.2	2.8	2.5	2.3
1	26 (23-31)	19 (16-22)	14 (11-16)	10 (8.2-12)	7.7 (6.0-9.1)	6.1 (4.7-7.2)	5.2 (3.8-6.0)	4.5 (3.3-5.2)	3.9 (2.8-4.7)	3.5 (2.5-4.2)	3.2 (2.2-3.8)
2	36 (30-46)	27 (21-34)	20 (15-26)	15 (11-19)	11 (7.9-15)	8.7 (6.0-12)	7.3 (4.8-9.7)	6.2 (4.0-8.4)	5.4 (3.4-7.4)	4.8 (3.0-6.6)	4.3 (2.6-6.0)
3	50 (40-60)	38 (29-48)	28 (20-37)	21 (15-29)	16 (11-22)	12 (8.0-18)	10 (6.4-15)	8.6 (5.3-13)	7.4 (4.5-12)	6.6 (3.9-10)	5.8 (3.4-9.3)
4	64 (54-71)	51 (41-59)	39 (30-47)	29 (22-37)	22 (16-29)	17 (13-23)	14 (10-20)	12 (8.5-17)	10 (7.2-15)	8.9 (6.2-13)	7.9 (5.4-12)
5	76 (70-80)	65 (57-69)	52 (45-57)	40 (34-45)	31 (26-36)	24 (20-29)	19 (16-24)	16 (13-21)	14 (11-18)	12 (10-16)	10 (8.7-14)
6	85	77	66	53	42	33	26	22	18	16	14

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

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	13	9.8	7.3	5.5	4.5	3.8	3.2	2.8	2.4	2.1
1	28 (23-45)	21 (17-34)	15 (12-24)	11 (8.7-17)	8.4 (6.4-12)	6.7 (5.0-9.1)	5.4 (4.0-7.0)	4.5 (3.3-5.4)	3.8 (2.8-4.4)	3.3 (2.4-3.8)	2.9 (2.1-3.4)
2	41 (30-61)	32 (22-48)	24 (16-37)	17 (12-27)	13 (8.5-20)	9.9 (6.6-15)	7.9 (5.2-11)	6.4 (4.2-8.9)	5.3 (3.5-7.1)	4.5 (3.0-6.0)	3.8 (2.5-5.3)
3	56 (40-71)	45 (30-60)	35 (22-48)	26 (16-37)	19 (11-27)	15 (8.8-21)	12 (6.9-17)	9.2 (5.6-13)	7.4 (4.6-11)	6.1 (3.9-8.7)	5.2 (3.3-7.3)
4	69 (51-79)	60 (40-71)	49 (30-59)	38 (22-47)	28 (17-36)	22 (13-28)	17 (10-22)	13 (8.5-17)	11 (7.1-14)	8.5 (6.0-11)	7.0 (5.2-9.6)
5	80 (64-84)	73 (54-78)	63 (43-69)	52 (33-57)	41 (25-45)	32 (20-36)	25 (16-28)	19 (13-22)	15 (11-18)	12 (9.4-15)	9.6 (8.1-12)
6	86	82	76	66	55	44	35	27	21	17	13

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	21	16	12	9.3	7.4	6.1	5.2	4.4	3.8	3.3	2.9
1	30 (24-47)	23 (18-37)	18 (14-28)	14 (10-21)	11 (8.0-16)	8.8 (6.5-12)	7.3 (5.3-9.7)	6.1 (4.4-7.7)	5.2 (3.7-6.2)	4.4 (3.2-5.1)	3.8 (2.7-4.3)
2	42 (31-59)	34 (24-49)	26 (18-40)	20 (14-31)	16 (11-24)	13 (8.5-19)	10 (6.9-15)	8.5 (5.6-12)	7.1 (4.7-9.7)	6.0 (3.9-7.9)	5.1 (3.3-6.6)
3	54 (39-68)	45 (31-60)	37 (24-50)	29 (18-40)	23 (14-32)	18 (11-25)	15 (9.1-20)	12 (7.5-17)	9.8 (6.2-14)	8.1 (5.2-11)	6.8 (4.4-9.4)
4	65 (48-75)	57 (40-68)	49 (31-59)	40 (24-50)	32 (19-40)	26 (16-33)	21 (13-27)	17 (11-22)	14 (9.0-18)	11 (7.6-15)	9.2 (6.5-12)
5	75 (58-80)	68 (50-74)	61 (42-67)	52 (34-58)	43 (27-49)	36 (23-41)	29 (19-34)	24 (16-28)	19 (13-23)	15 (11-19)	13 (9.7-16)
6	81	77	71	64	56	47	40	32	26	21	17

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

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	23	19	15	12	9.8	8.3	7.1	6.0	5.2	4.5	3.9
1	32 (25-47)	26 (20-39)	21 (16-31)	17 (12-24)	14 (10-20)	12 (8.4-16)	9.8 (7.0-13)	8.3 (5.9-11)	7.0 (5.0-8.7)	6.0 (4.3-7.2)	5.1 (3.6-5.9)
2	42 (31-57)	35 (26-49)	29 (20-41)	23 (16-34)	19 (13-28)	16 (11-23)	14 (9.0-19)	11 (7.5-16)	9.6 (6.3-13)	8.1 (5.3-11)	6.9 (4.5-9.0)
3	53 (40-65)	46 (33-58)	39 (26-51)	32 (21-43)	27 (17-36)	23 (14-30)	19 (12-26)	16 (9.9-22)	13 (8.3-18)	11 (7.0-15)	9.3 (5.9-13)
4	63 (48-72)	56 (41-66)	49 (34-59)	42 (28-52)	36 (23-45)	31 (20-38)	26 (17-33)	22 (14-28)	18 (12-23)	15 (10-20)	13 (8.6-17)
5	71 (56-77)	66 (49-72)	60 (43-66)	53 (36-60)	46 (31-53)	40 (27-47)	34 (23-41)	29 (20-35)	24 (17-30)	20 (14-25)	17 (12-21)
6	78	74	69	63	57	51	45	38	33	27	23

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	20	16	13	11	9.1	7.7	6.5	5.6	4.7	4.0	3.4
1	28 (21-41)	23 (17-34)	19 (14-28)	15 (11-23)	13 (9.3-19)	11 (7.8-16)	9.2 (6.6-13)	7.8 (5.6-11)	6.6 (4.7-8.9)	5.6 (3.9-7.3)	4.7 (3.3-6.0)
2	37 (27-51)	31 (22-44)	26 (18-37)	22 (15-31)	18 (12-27)	15 (10-23)	13 (8.6-19)	11 (7.2-16)	9.3 (6.0-13)	7.8 (5.1-11)	6.5 (4.3-9.1)
3	48 (34-60)	41 (29-54)	35 (23-47)	30 (19-40)	25 (16-35)	22 (14-30)	18 (11-25)	15 (9.6-21)	13 (8.0-18)	11 (6.7-15)	9.1 (5.6-13)
4	58 (43-68)	52 (36-62)	45 (30-55)	39 (25-49)	34 (22-43)	30 (19-37)	25 (16-32)	22 (13-28)	18 (11-23)	15 (9.6-20)	13 (8.1-17)
5	67 (52-73)	62 (45-69)	56 (39-63)	50 (33-57)	45 (29-51)	39 (25-46)	34 (22-40)	29 (19-35)	25 (16-30)	21 (14-26)	18 (12-22)
6	75	71	66	61	56	50	45	39	34	29	25