Estonia - 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 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	9.9	5.2	2.7	1.4	0.7	0.4	0.2	0.1	0.1	0.0	0.0
1	16 (10-20)	8.3 (5.4-11)	4.3 (2.8-5.6)	2.2 (1.4-2.9)	1.1 (0.7-1.5)	0.6 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	24 (14-34)	13 (7.7-19)	6.8 (4.0-10)	3.5 (2.0-5.4)	1.8 (1.0-2.8)	0.9 (0.5-1.4)	0.5 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
3	35 (21-51)	20 (11-31)	11 (6.0-17)	5.6 (3.1-9.2)	2.9 (1.6-4.8)	1.5 (0.8-2.5)	0.8 (0.4-1.3)	0.4 (0.2-0.7)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	48 (34-66)	29 (19-43)	16 (10-25)	8.7 (5.3-14)	4.5 (2.8-7.2)	2.3 (1.4-3.7)	1.2 (0.7-1.9)	0.6 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	64 (54-78)	42 (33-55)	24 (18-34)	13 (9.8-19)	7.0 (5.1-10)	3.6 (2.6-5.3)	1.9 (1.4-2.7)	1.0 (0.7-1.4)	0.5 (0.4-0.8)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
6	80	57	35	20	11	5.5	2.9	1.5	0.8	0.4	0.2

Ten year probability of hip 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	9.9	5.4	2.9	1.6	0.9	0.5	0.3	0.1	0.1	0.0	0.0
1	15 (10-19)	8.5 (5.7-10)	4.6 (3.1-5.7)	2.5 (1.7-3.1)	1.4 (0.9-1.7)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
2	23 (14-32)	13 (8.0-19)	7.3 (4.4-10)	4.0 (2.4-5.7)	2.1 (1.3-3.1)	1.2 (0.7-1.7)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	33 (21-48)	20 (12-30)	11 (6.6-17)	6.1 (3.6-9.7)	3.3 (1.9-5.3)	1.8 (1.0-2.9)	1.0 (0.6-1.6)	0.5 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	46 (33-63)	29 (20-42)	17 (11-25)	9.4 (6.1-14)	5.2 (3.3-8.0)	2.8 (1.8-4.4)	1.5 (1.0-2.4)	0.8 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
5	61 (53-75)	40 (34-53)	25 (20-34)	14 (11-20)	7.9 (6.2-11)	4.3 (3.3-6.2)	2.3 (1.8-3.4)	1.3 (1.0-1.9)	0.7 (0.6-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
6	76	55	35	21	12	6.5	3.5	2.0	1.1	0.6	0.3

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	9.8	5.6	3.2	1.8	1.0	0.6	0.3	0.2	0.1	0.1	0.0
1	15 (10-17)	8.6 (5.9-10)	4.9 (3.3-5.8)	2.8 (1.9-3.3)	1.5 (1.0-1.8)	0.9 (0.6-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	22 (14-29)	13 (8.3-18)	7.5 (4.7-10)	4.3 (2.6-5.9)	2.4 (1.5-3.3)	1.3 (0.8-1.9)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.3 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
3	32 (21-44)	19 (12-28)	11 (7.1-17)	6.5 (4.0-9.8)	3.7 (2.3-5.6)	2.1 (1.3-3.2)	1.2 (0.7-1.8)	0.7 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	44 (33-58)	28 (20-39)	17 (12-25)	9.8 (6.8-15)	5.6 (3.8-8.4)	3.2 (2.2-4.8)	1.8 (1.2-2.8)	1.0 (0.7-1.6)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)
5	58 (51-70)	39 (33-51)	24 (20-33)	14 (12-20)	8.4 (6.9-12)	4.8 (3.9-6.8)	2.7 (2.2-3.9)	1.6 (1.3-2.3)	0.9 (0.7-1.3)	0.5 (0.4-0.8)	0.3 (0.3-0.4)
6	72	52	34	21	12	7.1	4.1	2.4	1.4	0.8	0.5

Ten year probability of hip 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	10	6.1	3.6	2.1	1.2	0.7	0.4	0.3	0.2	0.1	0.1
1	15 (11-18)	9.3 (6.4-11)	5.5 (3.8-6.5)	3.2 (2.2-3.8)	1.9 (1.3-2.3)	1.1 (0.8-1.3)	0.7 (0.4-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
2	22 (15-28)	14 (9.0-18)	8.2 (5.3-11)	4.9 (3.1-6.4)	2.9 (1.8-3.8)	1.7 (1.1-2.2)	1.0 (0.6-1.3)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	31 (22-42)	20 (13-28)	12 (8.0-17)	7.3 (4.7-10)	4.3 (2.8-6.2)	2.5 (1.6-3.7)	1.5 (1.0-2.2)	0.9 (0.6-1.3)	0.6 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	43 (34-56)	28 (21-39)	18 (13-25)	11 (7.8-15)	6.4 (4.6-9.3)	3.8 (2.7-5.6)	2.3 (1.6-3.4)	1.4 (1.0-2.0)	0.8 (0.6-1.2)	0.5 (0.3-0.8)	0.3 (0.2-0.4)
5	55 (50-67)	39 (33-49)	25 (21-33)	16 (13-21)	9.4 (7.7-13)	5.6 (4.6-7.8)	3.4 (2.8-4.8)	2.1 (1.7-2.9)	1.2 (1.0-1.8)	0.8 (0.6-1.1)	0.5 (0.4-0.6)
6	69	51	35	22	14	8.2	5.0	3.0	1.8	1.1	0.7

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	11	6.8	4.2	2.6	1.6	1.0	0.6	0.4	0.2	0.2	0.1
1	18 (15-22)	11 (9.6-14)	7.0 (5.9-8.8)	4.3 (3.6-5.4)	2.6 (2.2-3.3)	1.6 (1.4-2.0)	1.0 (0.9-1.3)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)
2	28 (22-35)	18 (14-24)	11 (8.9-15)	7.1 (5.5-9.6)	4.3 (3.3-5.9)	2.7 (2.1-3.7)	1.7 (1.3-2.3)	1.1 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
3	41 (32-49)	28 (21-35)	18 (13-23)	11 (8.4-15)	7.1 (5.1-9.5)	4.5 (3.2-6.0)	2.8 (2.0-3.8)	1.8 (1.3-2.4)	1.1 (0.8-1.5)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
4	56 (46-63)	41 (32-47)	28 (21-33)	18 (13-22)	12 (8.4-14)	7.3 (5.3-9.1)	4.7 (3.3-5.9)	3.0 (2.1-3.7)	1.9 (1.3-2.4)	1.2 (0.8-1.5)	0.7 (0.5-0.9)
5	71 (63-74)	56 (48-61)	41 (34-45)	28 (22-32)	18 (14-21)	12 (9.2-14)	7.6 (5.9-8.8)	4.9 (3.8-5.7)	3.1 (2.4-3.6)	2.0 (1.5-2.3)	1.2 (1.0-1.4)
6	82	71	56	41	28	19	12	7.9	5.1	3.2	2.0

Ten year probability of hip 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	12	7.7	5.0	3.2	2.0	1.3	0.9	0.6	0.4	0.3	0.2
1	21 (16-41)	14 (11-29)	9.6 (7.0-20)	6.3 (4.5-13)	4.0 (2.9-8.5)	2.7 (1.9-5.7)	1.8 (1.2-3.8)	1.2 (0.8-2.5)	0.8 (0.5-1.6)	0.5 (0.3-1.1)	0.3 (0.2-0.7)
2	35 (22-57)	25 (15-43)	17 (9.8-31)	11 (6.3-22)	7.5 (4.1-14)	5.0 (2.7-9.8)	3.3 (1.8-6.6)	2.2 (1.2-4.4)	1.5 (0.8-2.9)	1.0 (0.5-1.9)	0.6 (0.3-1.3)
3	50 (32-69)	39 (22-56)	28 (15-43)	20 (9.5-31)	13 (6.1-22)	9.0 (4.1-15)	6.0 (2.7-10)	4.0 (1.8-7.0)	2.7 (1.2-4.7)	1.8 (0.8-3.1)	1.2 (0.5-2.1)
4	66 (44-77)	54 (32-67)	42 (22-55)	31 (15-42)	22 (9.7-31)	15 (6.5-22)	10 (4.4-15)	7.1 (2.9-10)	4.8 (1.9-7.1)	3.2 (1.3-4.7)	2.1 (0.8-3.2)
5	78 (58-83)	69 (46-75)	59 (34-65)	46 (24-53)	34 (16-40)	25 (11-29)	18 (7.4-21)	12 (5.0-14)	8.2 (3.3-9.9)	5.5 (2.2-6.7)	3.7 (1.5-4.5)
6	85	81	73	63	50	38	28	20	14	9.3	6.3

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	13	8.6	5.9	4.0	2.7	1.9	1.3	0.9	0.6	0.4	0.3
1	22 (16-42)	16 (11-31)	11 (7.7-23)	7.6 (5.2-16)	5.2 (3.5-11)	3.7 (2.5-7.9)	2.6 (1.7-5.6)	1.8 (1.2-3.9)	1.2 (0.8-2.7)	0.9 (0.6-1.9)	0.6 (0.4-1.3)
2	34 (22-55)	26 (15-44)	19 (11-34)	13 (7.3-25)	9.4 (5.0-18)	6.7 (3.5-13)	4.7 (2.4-9.3)	3.3 (1.7-6.6)	2.3 (1.2-4.6)	1.6 (0.8-3.2)	1.1 (0.6-2.3)
3	48 (30-66)	38 (22-56)	29 (16-45)	22 (11-35)	16 (7.5-26)	11 (5.3-19)	8.2 (3.7-14)	5.8 (2.6-9.9)	4.1 (1.8-7.1)	2.9 (1.2-5.0)	2.0 (0.9-3.5)
4	61 (41-73)	52 (31-65)	43 (23-55)	33 (16-44)	25 (11-35)	19 (8.1-27)	14 (5.7-20)	9.9 (4.0-15)	7.0 (2.8-10)	5.0 (2.0-7.5)	3.5 (1.4-5.3)
5	72 (52-78)	65 (42-71)	57 (33-63)	47 (24-54)	37 (18-44)	29 (13-35)	22 (9.3-27)	16 (6.6-20)	12 (4.7-14)	8.3 (3.3-10)	5.9 (2.3-7.4)
6	81	76	69	61	51	42	33	25	18	13	9.6

Ten year probability of hip 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	12	8.9	6.4	4.5	3.3	2.4	1.8	1.3	0.9	0.7	0.5
1	21 (16-40)	16 (11-31)	12 (8.3-24)	8.5 (5.9-18)	6.3 (4.3-14)	4.7 (3.2-10)	3.5 (2.3-7.6)	2.5 (1.7-5.6)	1.9 (1.3-4.1)	1.4 (0.9-3.0)	1.0 (0.7-2.2)
2	32 (21-51)	25 (16-43)	19 (11-34)	15 (8.3-26)	11 (6.1-21)	8.3 (4.5-16)	6.2 (3.3-12)	4.6 (2.4-9.1)	3.4 (1.8-6.8)	2.5 (1.3-5.0)	1.8 (0.9-3.7)
3	45 (28-61)	37 (21-53)	30 (16-45)	23 (12-36)	18 (8.9-29)	14 (6.7-23)	11 (5.0-18)	8.0 (3.7-13)	6.0 (2.7-10)	4.4 (2.0-7.5)	3.3 (1.4-5.6)
4	57 (37-69)	50 (30-62)	42 (23-54)	34 (17-45)	28 (13-37)	22 (9.9-30)	17 (7.4-24)	13 (5.5-19)	9.9 (4.1-14)	7.5 (3.0-11)	5.6 (2.2-8.2)
5	68 (47-74)	62 (39-68)	55 (32-61)	47 (25-53)	39 (19-45)	32 (15-38)	26 (12-31)	21 (8.7-25)	16 (6.5-19)	12 (4.9-15)	9.1 (3.6-11)
6	77	72	66	59	52	45	38	31	24	19	15

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	7.4	5.6	4.2	3.3	2.6	2.0	1.5	1.2	0.9	0.7
1	17 (13-34)	13 (9.6-27)	10 (7.3-21)	7.9 (5.5-17)	6.2 (4.3-13)	4.9 (3.4-11)	3.8 (2.6-8.3)	2.9 (2.0-6.5)	2.3 (1.5-5.0)	1.8 (1.2-3.9)	1.4 (0.9-3.0)
2	27 (17-44)	21 (13-37)	17 (10-30)	13 (7.7-24)	11 (6.1-20)	8.5 (4.7-16)	6.7 (3.7-13)	5.3 (2.8-10)	4.1 (2.2-8.0)	3.2 (1.7-6.3)	2.5 (1.3-4.9)
3	38 (23-55)	32 (18-48)	26 (14-40)	21 (11-34)	17 (8.6-28)	14 (6.8-23)	11 (5.3-19)	9.0 (4.2-15)	7.1 (3.2-12)	5.6 (2.5-9.4)	4.3 (2.0-7.4)
4	51 (31-63)	44 (25-57)	38 (20-49)	32 (16-42)	27 (13-36)	22 (10-30)	18 (7.9-25)	15 (6.2-20)	12 (4.9-16)	9.2 (3.8-13)	7.3 (3.0-10)
5	63 (41-69)	57 (34-63)	50 (28-57)	44 (23-50)	38 (18-44)	32 (15-38)	27 (12-32)	22 (9.6-27)	18 (7.6-22)	15 (6.0-18)	12 (4.7-14)
6	73	68	63	57	51	45	39	33	27	22	18