

Russia - 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 Russia. 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	17	8.8	4.6	2.4	1.2	0.6	0.3	0.2	0.1	0.1	0.0	
1	25 (17-32)	14 (9.2-18)	7.3 (4.8-9.5)	3.8 (2.5-5.0)	2.0 (1.3-2.6)	1.0 (0.7-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	
2	37 (24-51)	21 (13-31)	11 (6.8-17)	6.0 (3.5-9.1)	3.1 (1.8-4.8)	1.6 (0.9-2.5)	0.8 (0.5-1.3)	0.4 (0.2-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	
3	51 (34-69)	31 (19-46)	18 (10-27)	9.4 (5.3-15)	4.9 (2.7-8.0)	2.5 (1.4-4.2)	1.3 (0.7-2.2)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	
4	66 (50-82)	44 (30-61)	26 (17-39)	14 (9.0-22)	7.6 (4.7-12)	4.0 (2.4-6.3)	2.0 (1.2-3.3)	1.1 (0.7-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	
5	80 (72-90)	59 (48-73)	37 (29-50)	21 (16-30)	12 (8.6-17)	6.1 (4.5-8.9)	3.2 (2.3-4.6)	1.7 (1.2-2.4)	0.9 (0.6-1.3)	0.5 (0.3-0.7)	0.2 (0.2-0.4)	
6	90	74	51	31	17	9.3	4.9	2.6	1.4	0.7	0.4	

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

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	7.7	4.2	2.3	1.2	0.7	0.4	0.2	0.1	0.1	0.0
1	21 (15-25)	12 (8.1-15)	6.6 (4.4-8.1)	3.6 (2.4-4.5)	1.9 (1.3-2.4)	1.1 (0.7-1.3)	0.6 (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	31 (20-42)	18 (11-25)	10 (6.2-15)	5.6 (3.4-8.1)	3.1 (1.8-4.5)	1.7 (1.0-2.4)	0.9 (0.5-1.3)	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	43 (29-59)	27 (17-39)	15 (9.4-24)	8.7 (5.1-13)	4.8 (2.8-7.5)	2.6 (1.5-4.1)	1.4 (0.8-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)
4	57 (44-73)	38 (27-52)	23 (15-33)	13 (8.6-20)	7.3 (4.7-11)	4.0 (2.6-6.2)	2.2 (1.4-3.4)	1.2 (0.8-1.9)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)
5	72 (64-83)	51 (43-65)	33 (27-44)	19 (15-27)	11 (8.6-16)	6.1 (4.7-8.7)	3.3 (2.6-4.8)	1.9 (1.4-2.7)	1.0 (0.8-1.5)	0.6 (0.5-0.8)	0.3 (0.3-0.5)
6	84	66	45	28	16	9.1	5.0	2.8	1.6	0.9	0.5

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	12	6.7	3.8	2.1	1.2	0.7	0.4	0.2	0.1	0.1	0.0
1	18 (12-20)	10 (7.1-12)	5.9 (4.0-6.9)	3.3 (2.3-3.9)	1.9 (1.3-2.2)	1.0 (0.7-1.2)	0.6 (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	26 (17-34)	15 (9.9-21)	8.9 (5.6-12)	5.1 (3.2-7.0)	2.9 (1.8-4.0)	1.6 (1.0-2.2)	0.9 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
3	36 (25-49)	22 (15-32)	13 (8.5-20)	7.7 (4.8-12)	4.4 (2.7-6.6)	2.5 (1.5-3.8)	1.4 (0.9-2.2)	0.8 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
4	49 (38-63)	32 (23-44)	20 (14-28)	12 (8.1-17)	6.6 (4.6-9.9)	3.8 (2.6-5.7)	2.2 (1.5-3.3)	1.3 (0.9-1.9)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
5	63 (57-74)	44 (38-56)	28 (24-37)	17 (14-23)	9.9 (8.2-14)	5.7 (4.7-8.0)	3.3 (2.7-4.6)	1.9 (1.6-2.7)	1.1 (0.9-1.6)	0.6 (0.5-0.9)	0.4 (0.3-0.5)
6	76	57	39	24	14	8.4	4.9	2.8	1.7	1.0	0.6

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

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	11	6.8	4.0	2.4	1.4	0.8	0.5	0.3	0.2	0.1	0.1
1	17 (12-20)	10 (7.2-12)	6.1 (4.2-7.2)	3.6 (2.5-4.3)	2.1 (1.4-2.5)	1.2 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	24 (17-31)	15 (10-19)	9.1 (6.0-12)	5.4 (3.5-7.1)	3.2 (2.1-4.2)	1.9 (1.2-2.4)	1.1 (0.7-1.5)	0.7 (0.4-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
3	34 (24-44)	22 (15-29)	13 (9.0-19)	8.0 (5.3-11)	4.8 (3.1-6.8)	2.8 (1.8-4.0)	1.7 (1.1-2.5)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)
4	45 (36-57)	30 (23-41)	19 (14-27)	12 (8.7-17)	7.0 (5.2-10)	4.2 (3.0-6.1)	2.5 (1.8-3.7)	1.5 (1.1-2.3)	0.9 (0.7-1.4)	0.6 (0.4-0.8)	0.3 (0.2-0.5)
5	57 (52-68)	41 (36-51)	27 (23-35)	17 (14-23)	10 (8.5-14)	6.1 (5.1-8.5)	3.7 (3.1-5.2)	2.3 (1.9-3.2)	1.4 (1.1-2.0)	0.8 (0.7-1.2)	0.5 (0.4-0.7)
6	70	53	37	24	15	9.0	5.5	3.4	2.0	1.2	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	12	7.8	4.8	2.9	1.8	1.1	0.7	0.4	0.3	0.2	0.1
1	20 (17-25)	13 (11-16)	7.9 (6.7-10)	4.9 (4.1-6.2)	3.0 (2.5-3.8)	1.8 (1.6-2.3)	1.2 (1.0-1.5)	0.7 (0.6-0.9)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.2-0.2)
2	30 (25-38)	20 (16-26)	13 (10-17)	8.0 (6.2-11)	4.9 (3.8-6.7)	3.1 (2.4-4.2)	1.9 (1.5-2.7)	1.2 (0.9-1.7)	0.8 (0.6-1.1)	0.5 (0.4-0.7)	0.3 (0.2-0.4)
3	44 (35-51)	30 (24-37)	20 (15-25)	13 (9.5-17)	8.0 (5.9-11)	5.0 (3.7-6.7)	3.2 (2.3-4.3)	2.0 (1.5-2.7)	1.3 (0.9-1.7)	0.8 (0.6-1.1)	0.5 (0.4-0.7)
4	58 (49-65)	44 (35-50)	30 (23-36)	20 (15-24)	13 (9.5-16)	8.2 (6.0-10)	5.3 (3.8-6.6)	3.4 (2.4-4.2)	2.1 (1.5-2.7)	1.4 (1.0-1.7)	0.9 (0.6-1.1)
5	72 (65-75)	59 (50-63)	44 (36-48)	30 (25-34)	20 (16-23)	13 (10-15)	8.5 (6.6-9.8)	5.5 (4.3-6.3)	3.5 (2.7-4.1)	2.2 (1.7-2.6)	1.4 (1.1-1.6)
6	81	72	59	44	31	20	14	8.9	5.7	3.7	2.3

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

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	13	8.8	5.7	3.7	2.3	1.5	1.0	0.7	0.4	0.3	0.2
1	24 (18-44)	16 (12-32)	11 (8.0-22)	7.1 (5.2-15)	4.6 (3.3-9.8)	3.1 (2.2-6.6)	2.0 (1.5-4.4)	1.4 (1.0-2.9)	0.9 (0.6-1.9)	0.6 (0.4-1.3)	0.4 (0.3-0.8)
2	37 (25-59)	27 (17-46)	19 (11-34)	13 (7.3-24)	8.5 (4.7-16)	5.7 (3.1-11)	3.8 (2.1-7.5)	2.6 (1.4-5.1)	1.7 (0.9-3.4)	1.1 (0.6-2.2)	0.7 (0.4-1.5)
3	52 (35-70)	41 (24-58)	30 (16-45)	21 (11-33)	15 (7.1-23)	10 (4.7-16)	6.9 (3.1-11)	4.6 (2.1-7.8)	3.1 (1.4-5.3)	2.1 (0.9-3.5)	1.4 (0.6-2.4)
4	66 (46-77)	56 (34-68)	45 (24-56)	33 (16-44)	24 (11-33)	17 (7.4-24)	12 (5.0-17)	8.0 (3.3-12)	5.4 (2.2-7.9)	3.6 (1.5-5.3)	2.4 (1.0-3.6)
5	77 (59-82)	70 (47-76)	60 (35-66)	48 (25-54)	37 (17-42)	27 (12-31)	19 (8.3-23)	13 (5.6-16)	9.2 (3.8-11)	6.3 (2.5-7.5)	4.2 (1.7-5.1)
6	85	80	73	64	52	40	30	22	15	10	7.1

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	9.0	6.2	4.2	2.9	2.0	1.4	1.0	0.7	0.5	0.3
1	22 (17-42)	16 (12-32)	11 (8.0-23)	7.9 (5.5-17)	5.5 (3.8-12)	3.9 (2.7-8.5)	2.7 (1.9-6.0)	1.9 (1.3-4.2)	1.3 (0.9-3.0)	0.9 (0.6-2.1)	0.7 (0.4-1.4)
2	34 (22-53)	26 (16-43)	19 (11-34)	14 (7.7-25)	9.7 (5.3-18)	7.0 (3.7-13)	5.0 (2.6-9.7)	3.5 (1.8-6.9)	2.5 (1.3-4.9)	1.7 (0.9-3.5)	1.2 (0.6-2.4)
3	47 (30-64)	38 (22-54)	29 (16-44)	22 (11-34)	16 (7.8-26)	12 (5.6-19)	8.5 (3.9-14)	6.1 (2.8-10)	4.3 (1.9-7.4)	3.1 (1.4-5.2)	2.1 (0.9-3.7)
4	59 (39-71)	51 (30-63)	41 (23-54)	33 (16-43)	25 (12-34)	19 (8.3-26)	14 (5.9-20)	10 (4.2-15)	7.3 (3.0-11)	5.2 (2.1-7.6)	3.7 (1.5-5.5)
5	70 (50-76)	63 (40-69)	55 (31-61)	45 (24-52)	36 (17-42)	29 (13-34)	22 (9.3-26)	16 (6.7-20)	12 (4.8-15)	8.6 (3.4-11)	6.1 (2.4-7.6)
6	79	74	67	58	49	41	32	25	19	14	9.9

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

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	10	7.5	5.4	3.9	2.9	2.1	1.6	1.2	0.8	0.6	0.5
1	18 (13-35)	13 (9.7-27)	9.8 (7.0-21)	7.2 (5.1-15)	5.4 (3.7-12)	4.0 (2.8-8.8)	3.0 (2.1-6.6)	2.2 (1.5-4.9)	1.6 (1.1-3.6)	1.2 (0.8-2.7)	0.9 (0.6-2.0)
2	27 (18-45)	21 (13-37)	16 (9.7-29)	12 (7.1-22)	9.3 (5.3-17)	7.1 (3.9-13)	5.3 (2.9-10)	4.0 (2.1-7.7)	3.0 (1.6-5.8)	2.2 (1.2-4.3)	1.6 (0.9-3.2)
3	39 (23-56)	32 (18-47)	25 (13-39)	20 (9.8-31)	15 (7.4-25)	12 (5.6-19)	9.0 (4.2-15)	6.8 (3.1-11)	5.1 (2.3-8.6)	3.8 (1.7-6.5)	2.8 (1.3-4.8)
4	52 (32-64)	44 (25-56)	36 (19-48)	29 (14-39)	23 (11-32)	19 (8.3-26)	14 (6.3-20)	11 (4.7-16)	8.4 (3.5-12)	6.4 (2.6-9.0)	4.8 (1.9-6.8)
5	63 (41-69)	56 (34-63)	49 (27-55)	41 (20-47)	34 (16-39)	28 (12-33)	22 (9.4-26)	17 (7.2-21)	13 (5.4-16)	10 (4.0-12)	7.7 (3.0-9.5)
6	73	68	61	54	46	39	32	26	20	16	12

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	6.3	4.8	3.7	2.8	2.2	1.7	1.3	1.1	0.8	0.6	0.5
1	11 (8.2-23)	8.7 (6.3-19)	6.7 (4.8-14)	5.2 (3.7-11)	4.1 (2.9-9.1)	3.2 (2.3-7.2)	2.6 (1.8-5.7)	2.0 (1.4-4.5)	1.6 (1.1-3.5)	1.2 (0.8-2.8)	1.0 (0.7-2.2)
2	18 (11-32)	14 (8.4-26)	11 (6.4-21)	8.9 (5.0-16)	7.1 (3.9-13)	5.7 (3.1-11)	4.5 (2.4-8.5)	3.6 (1.9-6.8)	2.8 (1.5-5.4)	2.2 (1.2-4.2)	1.7 (0.9-3.3)
3	27 (15-41)	22 (12-35)	18 (8.9-28)	14 (6.9-23)	12 (5.5-19)	9.4 (4.4-16)	7.5 (3.4-13)	6.0 (2.7-10)	4.7 (2.1-8.0)	3.7 (1.7-6.3)	2.9 (1.3-5.0)
4	38 (21-50)	32 (16-43)	27 (13-36)	22 (10-30)	18 (8.1-25)	15 (6.5-21)	12 (5.1-17)	9.7 (4.1-14)	7.7 (3.2-11)	6.2 (2.5-8.8)	4.9 (2.0-7.0)
5	50 (28-57)	44 (23-50)	38 (18-43)	32 (15-37)	27 (12-31)	22 (9.6-26)	18 (7.7-22)	15 (6.1-18)	12 (4.8-15)	9.8 (3.8-12)	7.8 (3.0-9.5)
6	62	56	50	43	38	32	27	22	18	15	12