

Russia - The probabilities of a hip fracture in men

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	19	11	5.8	3.1	1.6	0.9	0.5	0.2	0.1	0.1	0.0	
1	28 (20-35)	16 (11-21)	8.9 (6.0-12)	4.8 (3.2-6.5)	2.6 (1.7-3.5)	1.4 (0.9-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	
2	38 (27-51)	24 (15-33)	13 (8.5-20)	7.4 (4.6-11)	4.0 (2.4-6.0)	2.1 (1.3-3.2)	1.1 (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)	
3	50 (37-64)	33 (22-45)	20 (13-28)	11 (6.9-17)	6.2 (3.7-9.4)	3.3 (2.0-5.1)	1.8 (1.0-2.7)	0.9 (0.6-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	
4	62 (50-73)	44 (32-57)	28 (19-39)	17 (11-24)	9.3 (5.9-14)	5.1 (3.2-7.7)	2.7 (1.7-4.2)	1.4 (0.9-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	
5	72 (64-79)	56 (47-67)	39 (30-49)	24 (18-32)	14 (10-19)	7.6 (5.4-11)	4.1 (2.9-5.8)	2.2 (1.6-3.1)	1.2 (0.8-1.7)	0.6 (0.5-0.9)	0.4 (0.3-0.5)	
6	80	68	50	33	20	11	6.1	3.3	1.8	1.0	0.5	

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	15	8.9	5.0	2.8	1.5	0.8	0.5	0.3	0.1	0.1	0.1
1	22 (16-28)	13 (9.3-17)	7.6 (5.2-9.6)	4.3 (2.9-5.4)	2.4 (1.6-3.0)	1.3 (0.9-1.7)	0.7 (0.5-0.9)	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	31 (22-41)	19 (13-26)	11 (7.4-16)	6.4 (4.1-9.1)	3.6 (2.3-5.2)	2.0 (1.3-2.9)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	42 (31-53)	27 (19-36)	16 (11-23)	9.6 (6.2-14)	5.4 (3.5-7.9)	3.0 (1.9-4.4)	1.7 (1.1-2.5)	0.9 (0.6-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	53 (42-63)	37 (27-47)	23 (17-32)	14 (9.6-20)	8.0 (5.4-12)	4.5 (3.0-6.7)	2.5 (1.7-3.8)	1.4 (0.9-2.1)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
5	63 (56-71)	47 (40-57)	32 (26-41)	20 (15-26)	12 (9.0-16)	6.7 (5.1-9.3)	3.8 (2.9-5.3)	2.1 (1.6-3.0)	1.2 (0.9-1.7)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
6	72	58	42	27	17	9.8	5.6	3.1	1.8	1.0	0.6

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	11	6.6	3.9	2.3	1.4	0.8	0.5	0.3	0.2	0.1	0.1
1	16 (11-19)	9.7 (6.9-12)	5.8 (4.1-7.0)	3.5 (2.4-4.2)	2.0 (1.4-2.5)	1.2 (0.8-1.4)	0.7 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	22 (16-28)	14 (9.6-18)	8.5 (5.8-11)	5.1 (3.4-6.9)	3.0 (2.0-4.1)	1.8 (1.2-2.4)	1.1 (0.7-1.4)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
3	30 (22-38)	19 (14-26)	12 (8.7-17)	7.5 (5.2-10)	4.5 (3.1-6.2)	2.7 (1.8-3.7)	1.6 (1.1-2.2)	0.9 (0.6-1.3)	0.6 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	39 (31-48)	27 (20-34)	17 (13-23)	11 (7.8-15)	6.5 (4.7-9.1)	3.9 (2.8-5.5)	2.3 (1.7-3.3)	1.4 (1.0-2.0)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)
5	48 (42-57)	35 (30-43)	24 (20-30)	15 (12-20)	9.3 (7.6-13)	5.7 (4.6-7.7)	3.4 (2.7-4.7)	2.0 (1.6-2.8)	1.2 (1.0-1.7)	0.7 (0.6-1.0)	0.5 (0.4-0.6)
6	58	44	31	21	13	8.1	4.9	2.9	1.8	1.1	0.7

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	8.7	5.5	3.5	2.2	1.4	0.9	0.5	0.3	0.2	0.1	0.1
1	12 (9.1-14)	7.9 (5.8-9.1)	5.0 (3.7-5.8)	3.2 (2.3-3.7)	2.0 (1.4-2.3)	1.3 (0.9-1.4)	0.8 (0.6-0.9)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.2)
2	17 (13-21)	11 (8.1-14)	7.2 (5.2-9.1)	4.6 (3.3-5.8)	2.9 (2.0-3.7)	1.8 (1.3-2.3)	1.1 (0.8-1.5)	0.7 (0.5-0.9)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
3	23 (17-29)	15 (11-20)	10 (7.4-13)	6.5 (4.8-8.7)	4.2 (3.0-5.6)	2.6 (1.9-3.5)	1.7 (1.2-2.2)	1.0 (0.8-1.4)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
4	29 (24-37)	21 (17-26)	14 (11-18)	9.1 (7.1-12)	5.9 (4.6-7.8)	3.8 (2.9-5.0)	2.4 (1.8-3.2)	1.5 (1.1-2.1)	1.0 (0.7-1.3)	0.6 (0.5-0.9)	0.4 (0.3-0.6)
5	37 (33-44)	27 (24-33)	19 (16-24)	13 (11-16)	8.2 (7.0-11)	5.3 (4.5-7.1)	3.4 (2.9-4.5)	2.2 (1.8-2.9)	1.4 (1.2-1.9)	0.9 (0.8-1.2)	0.6 (0.5-0.8)
6	45	34	25	17	11	7.4	4.7	3.1	2.0	1.3	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	7.8	5.3	3.6	2.4	1.6	1.0	0.7	0.5	0.3	0.2	0.1
1	12 (11-16)	8.2 (7.3-11)	5.6 (4.9-7.4)	3.8 (3.3-5.0)	2.5 (2.2-3.3)	1.7 (1.5-2.2)	1.1 (1.0-1.5)	0.7 (0.7-1.0)	0.5 (0.5-0.7)	0.3 (0.3-0.5)	0.2 (0.2-0.3)
2	18 (14-23)	13 (10-16)	8.6 (6.9-11)	5.9 (4.7-7.6)	4.0 (3.2-5.2)	2.6 (2.1-3.5)	1.8 (1.4-2.3)	1.2 (1.0-1.6)	0.8 (0.7-1.1)	0.6 (0.5-0.7)	0.4 (0.3-0.5)
3	25 (20-31)	18 (14-23)	13 (10-16)	9.0 (6.9-11)	6.2 (4.7-7.8)	4.2 (3.2-5.3)	2.8 (2.1-3.6)	1.9 (1.5-2.4)	1.3 (1.0-1.7)	0.9 (0.7-1.1)	0.6 (0.5-0.8)
4	34 (27-40)	26 (20-31)	19 (14-23)	14 (10-16)	9.4 (7.0-12)	6.4 (4.8-7.9)	4.3 (3.2-5.4)	3.0 (2.2-3.7)	2.1 (1.5-2.5)	1.4 (1.1-1.7)	1.0 (0.7-1.2)
5	44 (36-48)	35 (28-39)	27 (21-30)	20 (15-22)	14 (11-16)	9.7 (7.3-11)	6.7 (5.0-7.5)	4.6 (3.4-5.2)	3.2 (2.4-3.6)	2.2 (1.6-2.5)	1.5 (1.1-1.7)
6	54	45	36	27	20	14	10	7.1	5.0	3.5	2.4

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	7.4	5.3	3.8	2.7	1.9	1.3	0.9	0.7	0.5	0.3	0.3
1	13 (9.6-26)	9.5 (7.0-20)	6.9 (5.0-15)	5.0 (3.6-11)	3.6 (2.5-7.8)	2.5 (1.8-5.6)	1.8 (1.3-3.9)	1.3 (0.9-2.9)	0.9 (0.7-2.1)	0.7 (0.5-1.5)	0.5 (0.4-1.1)
2	21 (13-35)	16 (9.6-28)	12 (7.0-21)	8.6 (5.0-16)	6.2 (3.6-11)	4.5 (2.5-8.3)	3.2 (1.8-5.9)	2.3 (1.3-4.3)	1.7 (1.0-3.2)	1.2 (0.7-2.3)	0.9 (0.5-1.7)
3	30 (18-43)	24 (13-35)	18 (9.7-28)	14 (7.0-22)	10 (5.1-16)	7.5 (3.6-12)	5.4 (2.6-8.8)	4.0 (1.9-6.5)	2.9 (1.4-4.8)	2.1 (1.0-3.5)	1.5 (0.7-2.6)
4	41 (23-52)	34 (18-43)	27 (13-36)	21 (9.9-28)	16 (7.2-22)	12 (5.2-16)	8.8 (3.7-12)	6.5 (2.7-9.1)	4.8 (2.0-6.7)	3.6 (1.5-4.9)	2.6 (1.1-3.6)
5	52 (31-59)	45 (25-51)	37 (19-44)	30 (14-36)	24 (11-28)	18 (7.7-22)	14 (5.6-16)	10 (4.1-12)	7.8 (3.0-9.3)	5.8 (2.2-6.9)	4.3 (1.6-5.1)
6	63	56	49	41	33	26	20	16	12	9.1	6.8

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	7.1	5.4	4.0	3.0	2.2	1.7	1.2	0.9	0.7	0.5	0.4
1	12 (9.0-25)	9.4 (6.8-20)	7.2 (5.2-16)	5.5 (3.9-12)	4.1 (2.9-9.1)	3.1 (2.2-6.9)	2.3 (1.6-5.2)	1.8 (1.2-4.0)	1.4 (0.9-3.1)	1.0 (0.7-2.4)	0.8 (0.6-1.8)
2	19 (11-33)	15 (8.8-27)	12 (6.7-22)	9.2 (5.1-17)	7.0 (3.8-13)	5.3 (2.9-10)	4.0 (2.2-7.8)	3.1 (1.7-6.0)	2.4 (1.3-4.6)	1.8 (1.0-3.6)	1.4 (0.8-2.7)
3	28 (15-41)	23 (12-35)	18 (9.2-28)	14 (7.1-23)	11 (5.4-18)	8.7 (4.0-14)	6.7 (3.0-11)	5.2 (2.4-8.7)	4.0 (1.8-6.8)	3.1 (1.4-5.3)	2.4 (1.1-4.1)
4	38 (20-49)	32 (16-42)	26 (13-36)	21 (9.7-30)	17 (7.5-24)	13 (5.7-19)	10 (4.3-15)	8.3 (3.4-12)	6.5 (2.6-9.4)	5.1 (2.0-7.4)	3.9 (1.6-5.7)
5	48 (28-55)	42 (22-48)	36 (18-42)	30 (14-35)	25 (11-29)	20 (8.4-24)	16 (6.4-19)	13 (5.0-15)	10 (3.9-12)	7.9 (3.0-9.5)	6.2 (2.3-7.4)
6	59	53	47	40	34	28	23	19	15	12	9.5

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	6.4	5.0	4.0	3.1	2.4	1.9	1.5	1.2	1.0	0.8	0.6
1	11 (8.2-23)	8.9 (6.5-19)	7.1 (5.1-15)	5.6 (4.0-12)	4.5 (3.2-9.8)	3.5 (2.5-7.8)	2.8 (1.9-6.2)	2.2 (1.6-5.0)	1.8 (1.3-4.0)	1.4 (1.0-3.3)	1.2 (0.8-2.6)
2	18 (11-31)	15 (8.4-26)	12 (6.7-22)	9.5 (5.3-18)	7.6 (4.2-14)	6.0 (3.3-11)	4.8 (2.6-9.2)	3.9 (2.1-7.5)	3.2 (1.7-6.1)	2.5 (1.4-4.9)	2.0 (1.1-3.9)
3	26 (14-39)	22 (12-34)	18 (9.2-29)	15 (7.3-24)	12 (5.8-20)	9.8 (4.6-16)	7.9 (3.6-13)	6.5 (2.9-11)	5.3 (2.4-8.8)	4.3 (1.9-7.2)	3.4 (1.5-5.8)
4	36 (19-47)	31 (16-41)	27 (13-36)	22 (10-31)	18 (8.2-26)	15 (6.5-21)	12 (5.2-18)	10 (4.2-15)	8.4 (3.4-12)	6.9 (2.8-9.9)	5.6 (2.2-8.1)
5	47 (26-53)	42 (22-48)	36 (18-42)	31 (15-37)	27 (12-31)	22 (9.6-26)	19 (7.7-22)	16 (6.3-18)	13 (5.2-15)	11 (4.2-13)	8.8 (3.4-10)
6	58	53	47	42	36	31	27	23	19	16	13

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	4.6	3.8	3.1	2.6	2.1	1.7	1.4	1.2	1.0	0.8	0.7
1	8.3 (6.0-18)	6.9 (5.0-15)	5.7 (4.1-12)	4.7 (3.3-10)	3.9 (2.7-8.6)	3.2 (2.2-7.1)	2.7 (1.9-6.0)	2.2 (1.6-5.0)	1.9 (1.3-4.3)	1.6 (1.1-3.6)	1.3 (0.9-3.0)
2	14 (7.8-25)	11 (6.5-21)	9.6 (5.3-18)	8.0 (4.4-15)	6.6 (3.6-13)	5.5 (2.9-10)	4.6 (2.5-8.8)	3.9 (2.1-7.5)	3.3 (1.8-6.4)	2.8 (1.5-5.4)	2.3 (1.2-4.5)
3	21 (11-32)	18 (8.9-28)	15 (7.4-24)	13 (6.1-21)	11 (5.0-17)	8.9 (4.1-15)	7.6 (3.5-13)	6.5 (2.9-11)	5.5 (2.5-9.2)	4.7 (2.1-7.8)	3.9 (1.8-6.6)
4	30 (15-40)	26 (12-35)	23 (10-31)	19 (8.6-27)	16 (7.2-23)	14 (5.9-20)	12 (5.0-17)	10 (4.2-15)	8.8 (3.6-13)	7.5 (3.0-11)	6.4 (2.6-9.2)
5	40 (21-46)	36 (18-42)	32 (15-37)	28 (13-33)	24 (11-28)	21 (8.8-24)	18 (7.4-21)	16 (6.3-18)	13 (5.4-16)	12 (4.6-14)	9.9 (3.9-12)
6	51	47	43	38	34	29	26	23	20	17	15