Kazakhstan - The probabilities of a major osteoporotic fracture in men

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 Kazakhstan. 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/m²						
	15	20	25	30	35	40	45
0	4.1	4.0	4.0	3.5	3.1	2.7	2.3
1	6.4 (4.3-9.6)	6.2 (4.2-8.9)	6.2 (4.1-8.5)	5.4 (3.6-7.4)	4.7 (3.1-6.5)	4.1 (2.7-5.6)	3.6 (2.4-4.9)
2	9.9 (5.4-17)	9.5 (5.1-16)	9.3 (5.0-16)	8.1 (4.3-14)	7.1 (3.8-12)	6.2 (3.3-11)	5.4 (2.8-9.6)
3	15 (7.8-25)	14 (7.2-24)	14 (6.8-24)	12 (5.9-21)	11 (5.1-19)	9.2 (4.4-17)	8.0 (3.8-15)
4	22 (12-33)	21 (11-32)	20 (11-32)	17 (9.2-28)	15 (8.0-25)	13 (6.9-22)	12 (5.9-19)
5	31 (20-40)	29 (20-38)	28 (19-37)	25 (17-33)	22 (15-29)	19 (13-26)	17 (11-23)
6	43	40	39	34	30	26	23

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Ten years probability of osteoporotic fractures (%) according to BMI, the number of clinical risk factors (CRF) and age in men from Kazakhstan.

Age = 55 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	4.2	4.0	4.0	3.5	3.0	2.6	2.3
1	6.6 (4.4-9.7)	6.3 (4.2-8.9)	6.1 (4.1-8.4)	5.3 (3.6-7.3)	4.6 (3.1-6.3)	4.0 (2.6-5.4)	3.5 (2.3-4.7)
2	10 (5.8-16)	9.5 (5.3-16)	9.3 (5.1-16)	8.0 (4.3-14)	6.9 (3.7-12)	6.0 (3.2-10)	5.2 (2.8-9.1)
3	15 (8.6-24)	14 (7.6-23)	14 (7.1-23)	12 (6.0-20)	10 (5.2-18)	8.9 (4.4-16)	7.7 (3.8-14)
4	22 (13-33)	21 (12-31)	20 (11-31)	17 (9.4-27)	15 (8.0-24)	13 (6.8-21)	11 (5.8-18)
5	31 (20-40)	29 (20-38)	28 (19-36)	24 (17-32)	21 (15-28)	18 (13-25)	16 (11-22)
6	42	40	38	33	29	25	22

Age = 60 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	4.3	4.1	4.1	3.5	3.0	2.6	2.2
1	6.6 (4.6-9.6)	6.4 (4.3-8.9)	6.2 (4.2-8.4)	5.3 (3.6-7.2)	4.6 (3.1-6.2)	3.9 (2.6-5.3)	3.4 (2.2-4.6)
2	10 (6.1-16)	9.6 (5.6-15)	9.3 (5.3-15)	8.0 (4.5-13)	6.8 (3.8-12)	5.9 (3.2-10)	5.0 (2.7-8.7)
3	15 (9.0-22)	14 (8.3-22)	14 (7.5-22)	12 (6.3-19)	10 (5.4-17)	8.6 (4.5-15)	7.3 (3.8-13)
4	21 (14-31)	20 (13-30)	20 (12-30)	17 (9.7-26)	14 (8.1-23)	12 (6.8-20)	11 (5.7-17)
5	30 (20-38)	28 (20-37)	27 (19-36)	24 (17-31)	20 (14-27)	17 (12-24)	15 (10-20)
6	39	38	37	32	28	24	21

Ten years probability of osteoporotic fractures (%) according to BMI, the number of clinical risk factors (CRF) and age in men from Kazakhstan.

Age = 65 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	4.5	4.3	4.3	3.6	3.1	2.6	2.2
1	6.8 (4.7-9.5)	6.6 (4.5-8.9)	6.5 (4.4-8.6)	5.5 (3.7-7.3)	4.6 (3.1-6.2)	3.9 (2.6-5.2)	3.3 (2.2-4.5)
2	10 (6.5-15)	9.8 (6.0-15)	9.6 (5.7-15)	8.1 (4.7-13)	6.9 (3.9-11)	5.8 (3.3-9.7)	4.9 (2.8-8.4)
3	15 (9.2-21)	14 (8.7-21)	14 (8.3-22)	12 (6.9-19)	9.9 (5.7-16)	8.4 (4.7-14)	7.1 (4.0-12)
4	21 (14-28)	20 (13-29)	20 (12-29)	17 (10-25)	14 (8.4-22)	12 (6.9-19)	10 (5.7-16)
5	28 (20-35)	27 (20-35)	27 (20-35)	23 (17-30)	20 (14-26)	17 (12-23)	14 (9.9-19)
6	37	36	36	31	26	22	19

Age = 70 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	4.6	4.5	4.6	3.8	3.2	2.7	2.3
1	7.0 (4.8-9.0)	6.8 (4.7-8.8)	6.7 (4.7-8.7)	5.5 (3.9-7.3)	4.6 (3.2-6.1)	3.8 (2.6-5.1)	3.2 (2.2-4.3)
2	10 (6.6-16)	10.0 (6.3-15)	9.7 (6.1-14)	8.0 (5.0-12)	6.6 (4.1-9.9)	5.5 (3.4-8.3)	4.5 (2.8-6.9)
3	16 (9.3-24)	15 (8.8-22)	14 (8.7-20)	12 (7.1-17)	9.5 (5.7-14)	7.8 (4.7-12)	6.5 (3.8-9.9)
4	22 (15-31)	21 (14-29)	20 (13-28)	16 (11-24)	14 (8.6-20)	11 (6.9-17)	9.1 (5.6-14)
5	31 (26-39)	29 (24-37)	28 (22-36)	23 (18-30)	19 (15-25)	16 (12-21)	13 (9.7-18)
6	42	39	37	32	26	22	18

Ten years probability of osteoporotic fractures (%) according to BMI, the number of clinical risk factors (CRF) and age in men from Kazakhstan.

Age = 75 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	5.3	5.3	5.4	4.4	3.7	3.0	2.5
1	8.4 (5.5-13)	8.2 (5.5-12)	8.0 (5.5-10)	6.5 (4.5-8.3)	5.3 (3.6-6.7)	4.4 (3.0-5.5)	3.6 (2.4-4.6)
2	13 (7.4-21)	12 (7.3-20)	12 (7.3-18)	9.6 (5.9-14)	7.8 (4.8-12)	6.3 (3.9-9.5)	5.1 (3.1-7.7)
3	20 (10-32)	19 (10-29)	17 (10-26)	14 (8.0-22)	11 (6.5-18)	9.3 (5.2-14)	7.5 (4.2-12)
4	28 (16-40)	27 (15-38)	25 (15-35)	21 (12-29)	17 (9.8-24)	14 (7.8-20)	11 (6.3-16)
5	39 (26-48)	37 (25-46)	35 (25-44)	29 (20-37)	24 (17-31)	19 (13-26)	16 (11-21)
6	50	48	46	39	33	27	22

Age = 80 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	7.0	6.8	6.7	5.5	4.5	3.7	3.0
1	11 (7.3-18)	10 (7.1-16)	10 (7.0-14)	8.1 (5.6-11)	6.6 (4.5-8.9)	5.3 (3.7-7.1)	4.3 (3.0-5.6)
2	17 (9.8-27)	16 (9.5-24)	15 (9.4-21)	12 (7.5-17)	9.7 (6.0-14)	7.8 (4.8-11)	6.3 (3.9-9.0)
3	24 (14-36)	23 (13-34)	21 (13-31)	17 (10-25)	14 (8.2-21)	11 (6.5-17)	9.1 (5.2-14)
4	33 (20-45)	31 (19-42)	30 (19-39)	25 (15-33)	20 (12-28)	16 (9.9-23)	13 (7.9-19)
5	44 (29-52)	41 (28-50)	40 (28-48)	33 (23-42)	28 (19-36)	23 (15-30)	19 (12-25)
6	54	52	50	44	37	31	26

Ten years probability of osteoporotic fractures (%) according to BMI, the number of clinical risk factors (CRF) and age in men from Kazakhstan.

Age = 85 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	9.2	8.8	8.5	6.8	5.5	4.5	3.6
1	14 (9.8-23)	14 (9.3-21)	13 (8.9-19)	10 (7.1-15)	8.3 (5.7-12)	6.7 (4.5-9.4)	5.4 (3.6-7.4)
2	21 (13-34)	20 (12-31)	19 (12-28)	15 (9.6-23)	12 (7.6-18)	9.9 (6.0-15)	7.9 (4.8-12)
3	30 (18-44)	28 (17-41)	27 (16-39)	22 (13-32)	18 (10-27)	15 (8.2-22)	12 (6.5-18)
4	40 (26-53)	38 (24-50)	36 (24-48)	31 (20-41)	25 (16-35)	21 (13-29)	17 (10-24)
5	51 (36-59)	49 (35-58)	47 (34-56)	41 (28-49)	34 (23-43)	29 (19-37)	24 (15-31)
6	60	59	58	51	45	38	32

Age = 90 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	12	11	11	8.5	6.8	5.5	4.4
1	19 (13-30)	18 (12-28)	16 (11-25)	13 (9.1-20)	11 (7.2-16)	8.4 (5.7-13)	6.7 (4.5-9.9)
2	28 (18-42)	26 (16-39)	24 (16-36)	20 (12-30)	16 (9.8-24)	13 (7.7-20)	10 (6.0-16)
3	38 (24-52)	36 (22-50)	34 (21-47)	28 (17-40)	23 (13-34)	19 (11-28)	15 (8.3-23)
4	48 (33-61)	46 (31-59)	44 (30-56)	38 (24-50)	32 (20-43)	26 (16-36)	22 (13-30)
5	58 (44-65)	57 (42-65)	55 (41-63)	48 (35-57)	42 (29-51)	36 (24-44)	30 (19-38)
6	64	66	65	59	53	46	40