

Kazakhstan - 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 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/m ²						
	15	20	25	30	35	40	45
0	6.2	5.6	5.3	4.6	4.0	3.5	3.1
1	10 (7.0-15)	8.8 (6.1-13)	8.2 (5.6-11)	7.2 (4.9-9.9)	6.3 (4.3-8.6)	5.5 (3.7-7.5)	4.8 (3.2-6.6)
2	16 (8.9-25)	14 (7.5-22)	13 (6.8-21)	11 (5.9-18)	9.6 (5.2-16)	8.4 (4.5-14)	7.4 (3.9-13)
3	24 (13-39)	21 (11-35)	19 (9.4-32)	16 (8.1-29)	14 (7.0-25)	13 (6.1-23)	11 (5.3-20)
4	36 (21-52)	31 (18-45)	27 (15-42)	24 (13-37)	21 (12-33)	19 (10-30)	16 (8.7-26)
5	51 (35-62)	43 (30-54)	38 (27-49)	34 (24-44)	30 (21-39)	27 (19-35)	23 (16-31)
6	69	59	53	47	42	37	33

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

Age = 55 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	7.3	6.4	5.9	5.1	4.5	3.9	3.4
1	12 (8.5-17)	10 (7.1-14)	9.1 (6.3-12)	7.9 (5.5-11)	6.9 (4.8-9.3)	6.0 (4.1-8.1)	5.3 (3.6-7.1)
2	19 (11-29)	16 (9.0-24)	14 (7.8-22)	12 (6.7-20)	11 (5.8-17)	9.2 (5.0-15)	8.0 (4.4-13)
3	28 (16-43)	24 (13-38)	21 (11-35)	18 (9.4-31)	16 (8.1-27)	14 (6.9-24)	12 (6.0-21)
4	41 (26-57)	34 (22-49)	30 (18-45)	26 (16-40)	23 (13-36)	20 (12-32)	18 (9.9-28)
5	57 (41-67)	48 (35-58)	42 (31-52)	37 (27-47)	33 (24-42)	29 (21-37)	25 (18-33)
6	74	64	57	51	45	40	36

Age = 60 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	9.1	7.7	6.9	6.0	5.2	4.5	3.9
1	15 (11-20)	12 (8.7-16)	11 (7.6-14)	9.3 (6.5-12)	8.0 (5.6-11)	7.0 (4.8-9.2)	6.0 (4.2-8.0)
2	23 (14-33)	19 (11-27)	16 (9.4-25)	14 (8.1-22)	12 (6.9-19)	11 (6.0-17)	9.2 (5.1-15)
3	34 (22-48)	28 (16-42)	24 (13-38)	21 (11-34)	18 (9.8-30)	16 (8.4-26)	14 (7.2-23)
4	48 (32-62)	40 (26-55)	34 (22-49)	30 (19-44)	26 (16-39)	23 (14-35)	20 (12-31)
5	63 (49-72)	54 (41-64)	47 (36-57)	42 (31-52)	37 (27-46)	32 (24-41)	28 (21-36)
6	78	70	62	56	50	44	39

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

Age = 65 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	12	9.7	8.5	7.3	6.3	5.4	4.7
1	18 (14-24)	15 (11-19)	13 (9.4-17)	11 (8.0-14)	9.6 (6.8-12)	8.3 (5.9-11)	7.1 (5.0-9.2)
2	27 (19-38)	22 (15-31)	19 (12-29)	17 (10-25)	14 (8.6-22)	12 (7.3-19)	11 (6.2-17)
3	39 (28-52)	33 (22-46)	28 (17-43)	24 (14-38)	21 (12-33)	18 (10-29)	16 (8.9-26)
4	53 (39-66)	45 (32-60)	39 (28-55)	35 (24-49)	30 (20-44)	26 (17-39)	23 (15-34)
5	67 (56-75)	60 (49-69)	53 (42-63)	47 (37-57)	42 (32-51)	37 (28-46)	32 (24-41)
6	79	74	68	61	55	49	43

Age = 70 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	15	12	11	9.1	7.8	6.7	5.7
1	23 (17-27)	18 (14-23)	16 (12-20)	13 (10-17)	11 (8.5-15)	9.8 (7.2-13)	8.4 (6.1-11)
2	34 (23-44)	27 (19-36)	23 (15-31)	20 (13-27)	17 (11-23)	14 (9.1-20)	12 (7.7-17)
3	47 (35-60)	39 (27-53)	33 (22-46)	28 (19-40)	24 (16-35)	21 (13-30)	18 (11-26)
4	61 (49-73)	54 (42-67)	46 (35-60)	40 (30-53)	34 (25-47)	29 (21-41)	25 (18-36)
5	73 (68-80)	68 (62-76)	61 (53-70)	54 (46-63)	47 (40-57)	41 (34-50)	35 (29-44)
6	81	79	75	69	62	55	48

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

Age = 75 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	18	15	13	11	9.7	8.2	7.0
1	27 (20-38)	23 (17-30)	20 (15-23)	17 (12-20)	14 (10-17)	12 (8.8-15)	10 (7.4-13)
2	39 (27-55)	34 (22-46)	29 (19-38)	24 (16-32)	20 (13-27)	17 (11-23)	15 (9.4-19)
3	53 (37-69)	47 (33-62)	41 (27-55)	35 (23-48)	30 (19-41)	25 (16-35)	21 (14-30)
4	66 (50-77)	61 (46-74)	55 (40-69)	48 (34-62)	42 (29-55)	36 (25-48)	30 (21-41)
5	76 (65-82)	73 (62-81)	69 (58-78)	63 (52-72)	56 (45-65)	49 (39-58)	42 (34-51)
6	82	82	80	75	70	63	56

Age = 80 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	18	17	15	13	11	9.2	7.7
1	27 (20-39)	25 (18-34)	22 (17-28)	19 (14-23)	16 (11-19)	13 (9.5-16)	11 (7.9-13)
2	38 (27-53)	35 (24-47)	31 (21-40)	26 (18-34)	22 (15-29)	19 (12-24)	16 (10-20)
3	50 (35-64)	47 (33-60)	43 (30-54)	37 (25-47)	31 (21-41)	26 (18-35)	22 (15-29)
4	61 (46-72)	59 (45-69)	55 (42-67)	48 (36-60)	42 (30-54)	36 (25-47)	30 (21-41)
5	71 (59-77)	69 (57-76)	67 (55-75)	61 (49-69)	54 (43-63)	47 (37-56)	41 (31-50)
6	77	77	76	71	66	59	53

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

Age = 85 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	17	16	16	13	11	9.1	7.6
1	25 (18-37)	24 (17-34)	23 (17-30)	19 (14-25)	16 (11-20)	13 (9.2-17)	11 (7.5-13)
2	35 (24-50)	33 (23-46)	32 (22-42)	27 (18-36)	22 (15-30)	18 (12-25)	15 (9.8-21)
3	47 (32-61)	44 (30-58)	42 (29-55)	36 (24-48)	31 (20-42)	26 (16-35)	21 (13-30)
4	58 (43-69)	55 (41-67)	53 (40-64)	47 (34-58)	41 (28-52)	35 (23-45)	29 (19-39)
5	67 (55-73)	66 (53-73)	64 (52-72)	58 (46-66)	51 (40-60)	45 (34-54)	39 (29-47)
6	73	74	73	68	62	56	49

Age = 90 years

Number of CRFs	BMI kg/m ²						
	15	20	25	30	35	40	45
0	15	15	15	12	9.8	8.0	6.5
1	23 (17-35)	22 (16-32)	21 (15-29)	17 (12-24)	14 (9.9-19)	12 (8.0-16)	9.4 (6.4-13)
2	33 (22-47)	31 (21-44)	29 (20-41)	24 (16-34)	20 (13-29)	17 (11-23)	13 (8.5-19)
3	43 (29-58)	41 (27-55)	39 (26-53)	33 (21-46)	28 (17-39)	23 (14-33)	19 (11-28)
4	54 (39-65)	52 (37-64)	50 (36-62)	44 (31-55)	38 (25-49)	32 (21-42)	26 (17-36)
5	62 (51-68)	62 (49-69)	60 (48-68)	54 (42-63)	48 (36-57)	42 (30-51)	36 (25-44)
6	66	69	69	64	59	53	46