

South Korea - 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 South Korea. 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	3.7	3.3	3.1	2.7	2.4	2.1	1.8
1	6.0 (4.1-8.9)	5.3 (3.6-7.5)	4.9 (3.3-6.8)	4.3 (2.9-5.9)	3.8 (2.5-5.2)	3.3 (2.2-4.5)	2.9 (1.9-3.9)
2	9.6 (5.3-15)	8.3 (4.5-14)	7.6 (4.1-13)	6.6 (3.5-11)	5.8 (3.1-9.9)	5.0 (2.7-8.7)	4.4 (2.3-7.7)
3	15 (7.8-25)	13 (6.4-22)	12 (5.6-21)	10 (4.8-18)	8.8 (4.2-16)	7.6 (3.6-14)	6.7 (3.2-12)
4	23 (13-35)	19 (11-30)	17 (9.4-27)	15 (8.1-24)	13 (7.0-21)	11 (6.0-19)	9.9 (5.2-16)
5	35 (22-43)	29 (19-36)	25 (17-32)	22 (15-29)	19 (13-25)	17 (11-22)	15 (10-20)
6	50	41	35	31	27	24	21

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.8	4.2	3.9	3.4	3.0	2.6	2.3
1	7.8 (5.6-11)	6.7 (4.7-9.4)	6.1 (4.2-8.3)	5.3 (3.6-7.2)	4.6 (3.2-6.3)	4.0 (2.7-5.4)	3.5 (2.4-4.7)
2	12 (7.3-20)	10 (5.9-17)	9.4 (5.2-15)	8.2 (4.5-14)	7.1 (3.9-12)	6.2 (3.3-10)	5.4 (2.9-9.1)
3	19 (11-31)	16 (8.5-27)	14 (7.2-24)	12 (6.2-22)	11 (5.4-19)	9.3 (4.6-17)	8.1 (4.0-15)
4	29 (17-42)	24 (15-36)	21 (12-32)	18 (10-29)	16 (9.0-25)	14 (7.7-22)	12 (6.6-19)
5	43 (29-52)	35 (24-44)	30 (21-39)	26 (19-34)	23 (16-30)	20 (14-26)	18 (12-23)
6	59	49	42	37	33	29	25

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.4	5.4	4.9	4.2	3.7	3.2	2.8
1	10 (7.5-14)	8.5 (6.1-12)	7.6 (5.3-10)	6.5 (4.6-8.7)	5.7 (3.9-7.5)	4.9 (3.4-6.5)	4.3 (2.9-5.6)
2	16 (10-24)	13 (7.9-20)	12 (6.6-18)	10 (5.7-16)	8.6 (4.9-14)	7.5 (4.2-12)	6.5 (3.6-11)
3	25 (15-36)	20 (12-31)	17 (9.4-29)	15 (8.0-25)	13 (6.9-22)	11 (5.9-19)	9.7 (5.0-17)
4	36 (23-49)	30 (19-42)	25 (16-38)	22 (14-33)	19 (12-29)	17 (9.8-26)	14 (8.4-23)
5	51 (37-60)	42 (31-51)	36 (26-45)	31 (23-40)	27 (20-35)	24 (17-31)	21 (15-27)
6	66	57	49	44	38	34	29

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.4	6.9	6.0	5.2	4.5	3.8	3.3
1	13 (10-17)	11 (7.9-14)	9.3 (6.7-12)	8.0 (5.7-10)	6.8 (4.8-8.8)	5.9 (4.1-7.6)	5.1 (3.5-6.6)
2	20 (14-29)	16 (10-23)	14 (8.5-21)	12 (7.2-18)	10 (6.1-16)	8.9 (5.2-14)	7.7 (4.4-12)
3	30 (20-41)	24 (16-36)	21 (12-33)	18 (10-29)	15 (8.8-25)	13 (7.4-22)	11 (6.3-19)
4	42 (30-55)	35 (24-48)	30 (21-43)	26 (17-38)	22 (15-33)	19 (12-29)	17 (10-26)
5	56 (45-65)	48 (38-57)	42 (32-51)	36 (28-45)	32 (24-40)	27 (21-35)	24 (18-31)
6	70	63	56	49	43	38	33

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	8.8	7.5	6.4	5.4	4.6	4.0
1	17 (13-20)	13 (10-17)	11 (8.5-14)	9.5 (7.1-12)	8.1 (6.0-10)	6.9 (5.0-8.8)	5.8 (4.3-7.5)
2	26 (17-34)	20 (14-28)	17 (11-23)	14 (9.2-20)	12 (7.7-17)	10 (6.4-14)	8.6 (5.4-12)
3	37 (27-49)	30 (21-42)	25 (16-36)	21 (14-31)	18 (11-26)	15 (9.4-22)	13 (7.9-19)
4	51 (39-64)	43 (33-57)	36 (26-49)	31 (22-42)	26 (18-36)	22 (15-31)	18 (13-27)
5	65 (59-73)	58 (51-67)	50 (43-59)	43 (36-52)	37 (31-45)	32 (26-39)	27 (22-34)
6	75	72	65	58	51	44	38

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	11	9.3	7.8	6.6	5.6	4.7
1	20 (14-29)	17 (12-22)	14 (10-17)	12 (8.6-14)	9.8 (7.1-12)	8.2 (6.0-10)	6.9 (5.0-8.5)
2	30 (20-44)	25 (16-36)	21 (13-29)	17 (11-24)	15 (9.3-20)	12 (7.7-17)	10 (6.4-14)
3	43 (28-59)	37 (24-51)	31 (20-43)	26 (17-37)	22 (14-31)	18 (11-26)	15 (9.4-22)
4	57 (41-70)	51 (36-65)	44 (31-58)	38 (26-51)	32 (21-44)	27 (18-37)	22 (14-31)
5	69 (56-77)	65 (52-74)	59 (47-69)	52 (40-62)	45 (34-54)	38 (29-47)	32 (24-40)
6	78	76	73	67	60	53	45

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	12	11	10	8.5	7.1	5.9	5.0
1	19 (13-28)	17 (12-24)	15 (11-19)	12 (9.0-16)	10 (7.4-13)	8.6 (6.2-10)	7.1 (5.1-8.5)
2	28 (19-41)	25 (16-35)	22 (14-29)	18 (12-24)	15 (9.7-20)	12 (8.0-17)	10 (6.6-14)
3	39 (25-53)	35 (23-48)	31 (21-41)	26 (17-35)	22 (14-29)	18 (12-24)	15 (9.5-20)
4	51 (35-63)	47 (33-59)	43 (30-55)	36 (25-48)	31 (21-41)	26 (17-35)	21 (14-29)
5	62 (48-70)	59 (45-68)	55 (43-64)	49 (37-58)	42 (31-51)	35 (26-44)	30 (22-37)
6	72	70	67	61	54	47	40

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	10	9.4	9.1	7.5	6.2	5.1	4.2
1	16 (11-25)	14 (10-21)	13 (9.5-18)	11 (7.8-15)	9.0 (6.3-12)	7.4 (5.2-9.4)	6.1 (4.2-7.6)
2	24 (15-36)	21 (14-32)	20 (13-27)	16 (10-22)	13 (8.4-18)	11 (6.8-15)	8.7 (5.5-12)
3	34 (21-47)	31 (19-43)	28 (18-38)	23 (15-32)	19 (12-27)	16 (9.5-22)	13 (7.7-18)
4	45 (30-57)	42 (28-53)	38 (26-50)	32 (22-43)	27 (18-36)	22 (14-31)	18 (12-25)
5	56 (42-65)	54 (39-62)	50 (37-59)	43 (31-52)	37 (26-46)	31 (22-39)	26 (18-33)
6	66	64	62	55	49	42	35

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.2	6.8	6.7	5.4	4.4	3.6	3.0
1	12 (7.9-19)	11 (7.2-16)	10 (6.9-14)	8.1 (5.5-11)	6.5 (4.5-8.9)	5.3 (3.6-7.1)	4.3 (2.9-5.6)
2	18 (11-28)	16 (10-25)	15 (9.3-22)	12 (7.4-17)	9.6 (6.0-14)	7.7 (4.8-11)	6.2 (3.8-9.0)
3	26 (16-38)	24 (14-34)	21 (13-31)	17 (10-26)	14 (8.3-21)	11 (6.6-17)	9.1 (5.2-14)
4	36 (23-48)	33 (21-44)	30 (20-40)	25 (16-34)	20 (13-28)	17 (10-23)	13 (8.1-19)
5	47 (33-56)	44 (30-53)	41 (29-50)	35 (24-43)	29 (19-37)	24 (16-30)	19 (13-25)
6	57	55	53	46	39	33	27