

South Korea - 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 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	2.4	2.4	2.4	2.1	1.8	1.6	1.4
1	3.8 (2.5-5.7)	3.7 (2.5-5.3)	3.7 (2.4-5.1)	3.2 (2.1-4.4)	2.8 (1.8-3.9)	2.4 (1.6-3.4)	2.1 (1.4-2.9)
2	6.0 (3.2-10)	5.7 (3.0-9.9)	5.6 (3.0-9.9)	4.9 (2.6-8.6)	4.2 (2.2-7.5)	3.7 (1.9-6.6)	3.2 (1.7-5.8)
3	9.1 (4.6-15)	8.6 (4.3-15)	8.4 (4.1-15)	7.3 (3.5-13)	6.3 (3.0-12)	5.5 (2.6-10)	4.8 (2.3-8.9)
4	14 (7.3-21)	13 (6.8-21)	12 (6.4-20)	11 (5.5-18)	9.3 (4.8-15)	8.1 (4.1-14)	7.0 (3.5-12)
5	20 (12-27)	19 (12-25)	18 (12-24)	16 (10-21)	13 (9.1-18)	12 (7.9-16)	10 (6.8-14)
6	29	27	25	22	19	17	14

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.7	2.7	2.7	2.3	2.0	1.7	1.5
1	4.3 (2.9-6.4)	4.2 (2.8-5.9)	4.1 (2.7-5.6)	3.5 (2.4-4.8)	3.1 (2.0-4.2)	2.7 (1.8-3.6)	2.3 (1.5-3.1)
2	6.7 (3.8-11)	6.4 (3.5-11)	6.2 (3.4-11)	5.4 (2.9-9.3)	4.6 (2.5-8.1)	4.0 (2.1-7.0)	3.5 (1.8-6.1)
3	10 (5.6-16)	9.6 (5.0-16)	9.3 (4.7-16)	8.0 (4.0-14)	6.9 (3.4-12)	6.0 (2.9-11)	5.1 (2.5-9.3)
4	15 (8.7-23)	14 (7.9-22)	14 (7.4-22)	12 (6.3-19)	10 (5.3-16)	8.7 (4.5-14)	7.5 (3.9-12)
5	22 (14-29)	20 (13-27)	19 (13-26)	17 (11-23)	14 (9.9-20)	12 (8.5-17)	11 (7.3-15)
6	31	29	27	24	20	18	15

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.1	3.0	2.9	2.5	2.2	1.9	1.6
1	4.8 (3.3-7.0)	4.6 (3.1-6.4)	4.5 (3.0-6.1)	3.8 (2.6-5.2)	3.3 (2.2-4.5)	2.8 (1.9-3.8)	2.4 (1.6-3.3)
2	7.4 (4.4-12)	7.0 (4.0-11)	6.8 (3.8-11)	5.8 (3.2-9.7)	4.9 (2.7-8.4)	4.2 (2.3-7.3)	3.6 (2.0-6.3)
3	11 (6.6-17)	10 (5.9-17)	10 (5.4-17)	8.6 (4.6-15)	7.3 (3.8-13)	6.3 (3.3-11)	5.4 (2.8-9.3)
4	16 (10-24)	15 (9.2-23)	15 (8.4-23)	12 (7.1-20)	11 (5.9-17)	9.1 (5.0-15)	7.8 (4.2-13)
5	23 (15-30)	22 (15-28)	21 (14-27)	18 (12-24)	15 (11-21)	13 (9.0-18)	11 (7.6-15)
6	31	30	29	25	21	18	15

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.5	3.3	3.2	2.7	2.3	2.0	1.7
1	5.3 (3.7-7.4)	5.0 (3.5-6.9)	4.9 (3.4-6.5)	4.1 (2.8-5.5)	3.5 (2.4-4.6)	3.0 (2.0-3.9)	2.5 (1.7-3.3)
2	8.0 (5.1-12)	7.6 (4.6-12)	7.3 (4.3-12)	6.1 (3.6-10)	5.2 (3.0-8.6)	4.4 (2.5-7.4)	3.7 (2.1-6.3)
3	12 (7.4-17)	11 (6.9-17)	11 (6.3-17)	9.0 (5.2-15)	7.6 (4.3-12)	6.4 (3.6-11)	5.4 (3.0-9.1)
4	17 (11-24)	16 (11-23)	15 (9.7-23)	13 (7.9-20)	11 (6.5-17)	9.2 (5.4-15)	7.8 (4.4-12)
5	23 (16-30)	22 (16-29)	22 (16-28)	18 (13-24)	15 (11-21)	13 (9.3-18)	11 (7.8-15)
6	31	30	30	25	21	18	15

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.9	3.7	3.5	3.0	2.5	2.1	1.7
1	6.0 (4.2-7.7)	5.6 (3.9-7.2)	5.3 (3.7-6.8)	4.4 (3.1-5.7)	3.6 (2.5-4.8)	3.0 (2.1-4.0)	2.5 (1.7-3.4)
2	9.2 (5.8-14)	8.4 (5.3-13)	7.8 (4.9-11)	6.4 (4.0-9.5)	5.3 (3.3-7.9)	4.4 (2.7-6.6)	3.6 (2.2-5.5)
3	14 (8.2-21)	13 (7.7-19)	12 (7.3-17)	9.4 (5.9-14)	7.8 (4.8-12)	6.4 (3.9-9.5)	5.2 (3.2-7.9)
4	20 (13-28)	18 (12-26)	17 (11-24)	14 (8.9-20)	11 (7.2-17)	9.3 (5.8-14)	7.6 (4.7-11)
5	28 (23-36)	26 (21-34)	24 (19-31)	20 (16-26)	16 (13-22)	13 (10-18)	11 (8.3-15)
6	38	36	34	28	23	19	16

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.3	4.1	4.0	3.2	2.7	2.2	1.8
1	7.1 (4.7-11)	6.5 (4.3-9.5)	6.0 (4.1-8.0)	4.9 (3.4-6.4)	4.0 (2.7-5.1)	3.2 (2.2-4.1)	2.6 (1.8-3.3)
2	11 (6.6-19)	10 (6.0-16)	9.2 (5.6-14)	7.4 (4.5-11)	6.0 (3.6-9.0)	4.8 (2.9-7.3)	3.9 (2.4-5.8)
3	18 (9.3-29)	16 (8.5-25)	14 (8.0-21)	11 (6.4-17)	9.1 (5.1-14)	7.3 (4.1-11)	5.8 (3.3-9.0)
4	26 (15-37)	24 (13-34)	21 (12-30)	17 (9.9-25)	14 (7.9-20)	11 (6.3-16)	8.8 (5.0-13)
5	37 (24-46)	34 (22-43)	31 (21-39)	25 (17-33)	20 (14-27)	16 (11-22)	13 (8.8-18)
6	49	46	42	36	30	24	19

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.4	4.2	4.1	3.3	2.7	2.2	1.8
1	7.1 (4.7-12)	6.5 (4.4-10)	6.2 (4.2-8.7)	5.0 (3.4-6.9)	4.0 (2.7-5.5)	3.2 (2.2-4.3)	2.6 (1.8-3.4)
2	11 (6.7-19)	10 (6.1-16)	9.3 (5.8-14)	7.5 (4.6-11)	6.0 (3.7-8.7)	4.8 (2.9-6.9)	3.8 (2.3-5.5)
3	17 (9.5-27)	15 (8.6-24)	14 (8.1-21)	11 (6.4-17)	8.9 (5.1-13)	7.1 (4.0-11)	5.6 (3.2-8.6)
4	25 (14-35)	23 (13-31)	20 (13-28)	17 (10-23)	13 (7.9-19)	11 (6.2-15)	8.4 (4.9-12)
5	35 (22-44)	32 (20-40)	29 (19-37)	24 (15-31)	19 (12-25)	15 (9.9-21)	12 (7.9-16)
6	47	43	40	33	27	22	18

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.2	3.9	3.7	3.0	2.4	1.9	1.6
1	6.9 (4.6-12)	6.2 (4.1-9.9)	5.8 (3.9-8.5)	4.6 (3.1-6.7)	3.7 (2.5-5.2)	2.9 (2.0-4.1)	2.3 (1.6-3.2)
2	11 (6.5-18)	9.8 (5.9-16)	8.9 (5.4-14)	7.0 (4.3-11)	5.6 (3.4-8.4)	4.4 (2.7-6.6)	3.5 (2.1-5.2)
3	17 (9.3-26)	15 (8.3-23)	13 (7.6-20)	11 (6.0-16)	8.5 (4.7-13)	6.7 (3.7-10)	5.3 (2.9-8.2)
4	25 (14-35)	22 (13-31)	20 (12-28)	16 (9.4-23)	13 (7.4-18)	10 (5.8-15)	7.9 (4.6-12)
5	35 (22-43)	32 (20-40)	28 (18-36)	23 (15-30)	19 (12-25)	15 (9.2-20)	12 (7.3-16)
6	45	42	39	33	27	22	17

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.5	3.2	3.0	2.4	1.9	1.5	1.2
1	5.9 (3.9-10)	5.2 (3.4-8.6)	4.7 (3.2-7.4)	3.7 (2.5-5.7)	2.9 (1.9-4.4)	2.3 (1.5-3.4)	1.8 (1.2-2.7)
2	9.6 (5.6-16)	8.4 (4.9-14)	7.5 (4.5-12)	5.8 (3.5-9.3)	4.6 (2.7-7.3)	3.6 (2.1-5.6)	2.8 (1.7-4.4)
3	15 (8.1-23)	13 (7.1-20)	12 (6.3-18)	9.1 (4.9-14)	7.1 (3.8-11)	5.5 (3.0-8.8)	4.3 (2.3-6.9)
4	22 (12-31)	20 (11-28)	17 (9.8-25)	14 (7.7-20)	11 (6.1-16)	8.5 (4.8-12)	6.6 (3.7-9.7)
5	31 (19-39)	28 (17-36)	25 (15-33)	20 (12-27)	16 (9.6-22)	13 (7.5-17)	10 (5.9-14)
6	41	39	35	29	24	19	15