South Korea - The probabilities of a hip fracture in women

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 South Korea. 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	14	7.2	3.7	1.9	1.0	0.5	0.3	0.1	0.1	0.0	0.0
1	21 (14-27)	11 (7.5-15)	6.0 (3.9-7.8)	3.1 (2.0-4.1)	1.6 (1.0-2.1)	0.8 (0.5-1.1)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	31 (20-44)	18 (11-26)	9.4 (5.5-14)	4.9 (2.9-7.5)	2.5 (1.5-3.9)	1.3 (0.7-2.0)	0.7 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	44 (28-63)	26 (16-40)	15 (8.3-23)	7.7 (4.3-13)	4.0 (2.2-6.6)	2.1 (1.1-3.4)	1.1 (0.6-1.8)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.0-0.1)
4	60 (44-77)	38 (26-54)	22 (14-33)	12 (7.4-19)	6.3 (3.8-9.9)	3.2 (2.0-5.2)	1.7 (1.0-2.7)	0.9 (0.5-1.4)	0.5 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
5	75 (65-87)	52 (42-67)	32 (24-43)	18 (13-25)	9.6 (7.1-14)	5.0 (3.7-7.3)	2.6 (1.9-3.8)	1.4 (1.0-2.0)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.1-0.3)
6	88	68	45	26	14	7.7	4.0	2.1	1.1	0.6	0.3

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

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	14	7.6	4.2	2.3	1.2	0.7	0.4	0.2	0.1	0.1	0.0
1	21 (14-25)	12 (8.0-14)	6.6 (4.4-8.1)	3.6 (2.4-4.4)	1.9 (1.3-2.4)	1.0 (0.7-1.3)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	31 (20-42)	18 (11-25)	10 (6.2-15)	5.6 (3.4-8.1)	3.0 (1.8-4.4)	1.6 (1.0-2.4)	0.9 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	43 (29-60)	27 (17-39)	15 (9.3-24)	8.6 (5.1-13)	4.7 (2.8-7.5)	2.6 (1.5-4.1)	1.4 (0.8-2.2)	0.8 (0.4-1.2)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)
4	58 (44-74)	38 (27-53)	23 (15-34)	13 (8.6-20)	7.3 (4.7-11)	4.0 (2.6-6.2)	2.1 (1.4-3.4)	1.2 (0.8-1.9)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)
5	72 (65-84)	52 (44-65)	33 (27-44)	19 (15-27)	11 (8.6-16)	6.0 (4.7-8.7)	3.3 (2.6-4.8)	1.8 (1.4-2.7)	1.0 (0.8-1.5)	0.6 (0.4-0.8)	0.3 (0.3-0.5)
6	85	67	45	28	16	9.1	5.0	2.8	1.6	0.9	0.5

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	14	8.3	4.7	2.7	1.5	0.8	0.5	0.3	0.2	0.1	0.1
1	21 (15-25)	13 (8.7-15)	7.3 (5.0-8.6)	4.1 (2.8-4.9)	2.3 (1.6-2.8)	1.3 (0.9-1.5)	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 (21-40)	19 (12-25)	11 (7.0-15)	6.3 (4.0-8.7)	3.6 (2.2-4.9)	2.0 (1.2-2.8)	1.1 (0.7-1.6)	0.7 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	43 (30-57)	27 (18-38)	16 (10-24)	9.6 (6.0-14)	5.5 (3.4-8.3)	3.1 (1.9-4.7)	1.8 (1.1-2.7)	1.0 (0.6-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	56 (45-71)	38 (28-52)	24 (17-34)	14 (10-21)	8.2 (5.7-12)	4.7 (3.2-7.1)	2.7 (1.8-4.1)	1.6 (1.1-2.4)	0.9 (0.6-1.4)	0.5 (0.4-0.8)	0.3 (0.2-0.5)
5	70 (65-81)	51 (45-64)	34 (29-44)	21 (17-28)	12 (10-17)	7.0 (5.8-9.9)	4.1 (3.3-5.8)	2.4 (1.9-3.4)	1.4 (1.1-2.0)	0.8 (0.7-1.1)	0.5 (0.4-0.7)
6	82	65	46	29	18	10	6.0	3.5	2.1	1.2	0.7

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

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	15	9.1	5.4	3.2	1.8	1.1	0.6	0.4	0.2	0.1	0.1
1	22 (16-25)	13 (9.5-16)	8.1 (5.7-9.6)	4.8 (3.3-5.7)	2.8 (1.9-3.4)	1.6 (1.1-2.0)	1.0 (0.7-1.2)	0.6 (0.4-0.7)	0.4 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
2	31 (22-39)	20 (13-25)	12 (7.9-16)	7.2 (4.7-9.4)	4.2 (2.8-5.6)	2.5 (1.6-3.3)	1.5 (1.0-2.0)	0.9 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
3	42 (31-54)	28 (19-37)	17 (12-24)	11 (7.1-15)	6.3 (4.2-9.1)	3.7 (2.4-5.4)	2.3 (1.5-3.3)	1.4 (0.9-2.0)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
4	54 (45-67)	38 (30-50)	25 (19-34)	15 (12-22)	9.4 (6.9-13)	5.6 (4.1-8.1)	3.4 (2.5-5.0)	2.1 (1.5-3.0)	1.2 (0.9-1.8)	0.8 (0.5-1.1)	0.5 (0.3-0.7)
5	67 (62-77)	50 (45-61)	34 (30-44)	22 (19-29)	14 (11-19)	8.2 (6.7-11)	5.0 (4.1-7.0)	3.1 (2.5-4.3)	1.9 (1.5-2.6)	1.1 (0.9-1.6)	0.7 (0.6-1.0)
6	78	63	46	31	19	12	7.3	4.5	2.7	1.7	1.0

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	16	9.9	6.1	3.8	2.3	1.4	0.9	0.6	0.4	0.2	0.1
1	24 (21-30)	16 (14-20)	10 (8.6-13)	6.2 (5.3-7.9)	3.8 (3.2-4.9)	2.4 (2.0-3.0)	1.5 (1.3-1.9)	0.9 (0.8-1.2)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
2	36 (30-45)	25 (20-32)	16 (13-21)	10 (8.0-14)	6.3 (4.9-8.5)	3.9 (3.1-5.3)	2.5 (1.9-3.4)	1.6 (1.2-2.2)	1.0 (0.8-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.5)
3	51 (42-59)	36 (29-44)	25 (19-31)	16 (12-21)	10 (7.5-13)	6.4 (4.7-8.5)	4.1 (3.0-5.5)	2.6 (1.9-3.5)	1.7 (1.2-2.2)	1.0 (0.8-1.4)	0.7 (0.5-0.9)
4	65 (56-71)	51 (41-57)	37 (29-42)	25 (19-30)	16 (12-20)	10 (7.6-13)	6.7 (4.9-8.3)	4.3 (3.1-5.4)	2.7 (2.0-3.4)	1.7 (1.2-2.2)	1.1 (0.8-1.4)
5	77 (71-79)	65 (57-69)	51 (43-55)	37 (30-41)	25 (20-28)	16 (13-19)	11 (8.4-12)	7.0 (5.4-8.0)	4.5 (3.5-5.2)	2.9 (2.2-3.3)	1.8 (1.4-2.1)
6	84	77	65	51	37	25	17	11	7.3	4.7	3.0

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

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	14	9.5	6.2	4.0	2.6	1.7	1.1	0.7	0.5	0.3	0.2
1	25 (20-47)	17 (13-34)	12 (8.6-24)	7.7 (5.6-16)	5.0 (3.6-11)	3.3 (2.4-7.1)	2.2 (1.6-4.8)	1.5 (1.0-3.2)	1.0 (0.7-2.1)	0.6 (0.5-1.4)	0.4 (0.3-0.9)
2	39 (27-61)	29 (18-48)	20 (12-36)	14 (7.9-26)	9.2 (5.1-17)	6.2 (3.4-12)	4.2 (2.3-8.1)	2.8 (1.5-5.5)	1.9 (1.0-3.7)	1.2 (0.7-2.4)	0.8 (0.4-1.6)
3	54 (37-72)	43 (26-61)	32 (18-48)	23 (12-35)	16 (7.7-25)	11 (5.1-18)	7.4 (3.4-12)	5.0 (2.3-8.4)	3.4 (1.5-5.7)	2.2 (1.0-3.8)	1.5 (0.7-2.6)
4	68 (49-79)	58 (36-70)	47 (26-59)	35 (18-47)	26 (12-35)	18 (8.0-25)	13 (5.4-18)	8.7 (3.6-12)	5.9 (2.4-8.5)	4.0 (1.6-5.8)	2.6 (1.1-3.9)
5	79 (61-84)	72 (49-78)	62 (38-68)	51 (27-57)	39 (19-44)	29 (13-33)	21 (8.9-24)	15 (6.1-17)	10 (4.1-12)	6.8 (2.7-8.1)	4.6 (1.8-5.5)
6	85	81	75	66	54	43	32	23	16	11	7.7

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	11	7.8	5.3	3.6	2.5	1.7	1.2	0.8	0.6	0.4	0.3
1	20 (15-38)	14 (10-29)	9.9 (7.0-21)	6.9 (4.7-15)	4.8 (3.3-10)	3.4 (2.3-7.3)	2.4 (1.6-5.2)	1.7 (1.1-3.6)	1.2 (0.8-2.5)	0.8 (0.5-1.8)	0.6 (0.4-1.2)
2	31 (20-50)	23 (14-40)	17 (9.7-30)	12 (6.7-22)	8.4 (4.6-16)	6.0 (3.2-12)	4.3 (2.3-8.4)	3.0 (1.6-6.0)	2.1 (1.1-4.2)	1.5 (0.8-3.0)	1.0 (0.5-2.1)
3	44 (27-61)	35 (19-51)	26 (14-41)	19 (9.7-31)	14 (6.8-23)	10 (4.8-17)	7.4 (3.4-12)	5.3 (2.4-8.9)	3.7 (1.7-6.4)	2.6 (1.2-4.5)	1.8 (0.8-3.2)
4	57 (36-69)	48 (27-60)	38 (20-50)	30 (14-40)	22 (10-31)	17 (7.2-23)	12 (5.1-17)	8.8 (3.6-13)	6.3 (2.6-9.3)	4.5 (1.8-6.6)	3.2 (1.3-4.7)
5	69 (47-74)	61 (37-67)	52 (29-58)	42 (21-49)	33 (15-39)	26 (11-31)	19 (8.1-23)	14 (5.8-17)	10 (4.1-13)	7.4 (2.9-9.3)	5.3 (2.1-6.6)
6	78	72	65	56	46	37	29	22	16	12	8.6

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

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	7.7	5.6	4.0	2.9	2.1	1.6	1.2	0.9	0.6	0.5	0.3
1	14 (10-28)	10 (7.3-21)	7.4 (5.2-16)	5.4 (3.8-12)	4.0 (2.8-8.8)	3.0 (2.1-6.6)	2.2 (1.5-4.9)	1.6 (1.1-3.6)	1.2 (0.8-2.7)	0.9 (0.6-2.0)	0.7 (0.4-1.5)
2	22 (13-37)	17 (9.9-30)	13 (7.3-23)	9.3 (5.3-17)	7.0 (3.9-13)	5.3 (2.9-10)	4.0 (2.1-7.6)	3.0 (1.6-5.7)	2.2 (1.2-4.3)	1.6 (0.9-3.2)	1.2 (0.6-2.4)
3	32 (18-48)	26 (14-39)	20 (10-31)	15 (7.3-24)	12 (5.5-19)	8.9 (4.1-15)	6.7 (3.1-11)	5.1 (2.3-8.6)	3.8 (1.7-6.4)	2.8 (1.3-4.8)	2.1 (0.9-3.6)
4	44 (25-57)	37 (19-48)	30 (15-40)	23 (11-32)	18 (8.2-25)	14 (6.2-20)	11 (4.6-15)	8.3 (3.5-12)	6.3 (2.6-9.0)	4.7 (1.9-6.8)	3.5 (1.4-5.1)
5	57 (34-63)	49 (27-55)	41 (21-47)	34 (16-39)	27 (12-32)	22 (9.3-26)	17 (7.0-20)	13 (5.3-16)	10 (4.0-12)	7.7 (3.0-9.4)	5.8 (2.2-7.1)
6	68	62	54	46	39	32	26	20	16	12	9.2

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	4.5	3.4	2.6	2.0	1.5	1.2	1.0	0.7	0.6	0.5	0.4
1	8.2 (5.9-17)	6.3 (4.5-14)	4.8 (3.4-11)	3.7 (2.6-8.2)	2.9 (2.0-6.5)	2.3 (1.6-5.1)	1.8 (1.2-4.1)	1.4 (1.0-3.2)	1.1 (0.8-2.5)	0.9 (0.6-2.0)	0.7 (0.5-1.5)
2	14 (7.8-25)	11 (6.0-20)	8.2 (4.6-15)	6.4 (3.5-12)	5.1 (2.8-9.6)	4.1 (2.2-7.7)	3.2 (1.7-6.1)	2.5 (1.4-4.8)	2.0 (1.1-3.8)	1.6 (0.8-3.0)	1.2 (0.7-2.4)
3	21 (11-33)	17 (8.3-27)	13 (6.4-22)	11 (4.9-17)	8.5 (3.9-14)	6.8 (3.1-11)	5.4 (2.4-9.0)	4.3 (1.9-7.2)	3.4 (1.5-5.7)	2.7 (1.2-4.5)	2.1 (0.9-3.6)
4	31 (15-41)	25 (12-34)	20 (9.3-28)	16 (7.2-23)	13 (5.8-19)	11 (4.6-15)	8.7 (3.6-12)	7.0 (2.9-10)	5.5 (2.3-8.0)	4.4 (1.8-6.3)	3.5 (1.4-5.0)
5	42 (22-48)	36 (17-41)	30 (14-34)	24 (11-29)	20 (8.6-24)	17 (6.9-20)	14 (5.5-16)	11 (4.3-13)	8.8 (3.4-11)	7.0 (2.7-8.5)	5.6 (2.1-6.8)
6	54	47	41	35	29	25	20	17	14	11	8.8