

China - 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 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 China. 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	11	7.0	4.7	3.5	2.7	2.2	1.9	1.7	1.6	1.5	1.5
1	17 (15-21)	11 (9.4-14)	7.3 (6.1-9.2)	5.3 (4.1-6.6)	4.1 (3.0-5.1)	3.3 (2.3-4.4)	2.8 (1.9-3.8)	2.6 (1.7-3.5)	2.4 (1.6-3.4)	2.3 (1.5-3.2)	2.2 (1.4-3.1)
2	25 (19-35)	16 (13-23)	11 (8.2-16)	8.0 (5.4-11)	6.1 (3.8-9.5)	5.0 (2.9-8.1)	4.2 (2.3-7.1)	3.8 (2.0-6.5)	3.6 (1.9-6.2)	3.4 (1.8-6.0)	3.3 (1.7-5.8)
3	36 (26-48)	24 (17-31)	16 (11-23)	12 (7.3-19)	9.0 (5.1-15)	7.3 (3.8-13)	6.1 (3.0-11)	5.5 (2.6-10)	5.2 (2.4-10)	5.0 (2.3-9.6)	4.8 (2.2-9.3)
4	49 (35-62)	34 (23-42)	23 (16-30)	17 (11-24)	13 (8.6-20)	11 (6.4-17)	8.8 (5.0-14)	7.9 (4.3-13)	7.5 (4.0-13)	7.1 (3.7-12)	6.9 (3.5-12)
5	64 (54-74)	46 (37-53)	33 (26-37)	24 (18-29)	18 (14-23)	15 (11-20)	12 (9.4-17)	11 (8.1-16)	11 (7.4-15)	10 (6.9-14)	9.6 (6.5-14)
6	79	61	45	33	25	21	17	15	15	14	13

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

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	12	7.9	5.6	4.2	3.3	2.7	2.3	2.1	2.0	1.8	1.7
1	18 (16-21)	12 (11-15)	8.5 (7.1-10)	6.3 (4.9-7.7)	5.0 (3.7-6.2)	4.1 (2.8-5.3)	3.4 (2.3-4.6)	3.1 (2.1-4.3)	2.9 (1.9-4.1)	2.7 (1.8-3.9)	2.6 (1.7-3.7)
2	26 (21-35)	18 (14-24)	13 (9.5-17)	9.4 (6.5-13)	7.4 (4.7-11)	6.0 (3.6-9.5)	5.0 (2.8-8.2)	4.6 (2.5-7.7)	4.3 (2.3-7.3)	4.0 (2.1-6.9)	3.8 (2.0-6.6)
3	37 (28-47)	26 (19-34)	18 (13-26)	14 (8.7-21)	11 (6.2-18)	8.7 (4.7-15)	7.3 (3.7-13)	6.6 (3.2-12)	6.2 (2.9-12)	5.8 (2.7-11)	5.5 (2.6-10)
4	50 (37-60)	36 (25-43)	26 (18-33)	19 (13-27)	15 (10-23)	12 (7.8-19)	10 (6.1-17)	9.4 (5.3-16)	8.8 (4.8-15)	8.3 (4.4-14)	7.8 (4.1-13)
5	64 (55-72)	48 (40-53)	36 (29-41)	27 (22-33)	21 (17-27)	17 (14-23)	14 (11-20)	13 (9.6-18)	12 (8.6-17)	12 (7.9-16)	11 (7.4-16)
6	77	62	48	37	29	24	20	18	17	16	15

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	13	9.3	6.7	5.0	4.0	3.2	2.7	2.5	2.3	2.1	2.0
1	20 (18-23)	14 (12-16)	10 (8.3-12)	7.5 (5.9-9.0)	5.9 (4.4-7.4)	4.7 (3.4-6.2)	4.0 (2.8-5.5)	3.7 (2.5-5.1)	3.4 (2.2-4.7)	3.1 (2.0-4.4)	2.9 (1.9-4.2)
2	28 (23-36)	20 (16-26)	15 (11-19)	11 (7.7-15)	8.6 (5.6-13)	6.9 (4.2-11)	5.9 (3.4-9.5)	5.4 (3.0-8.8)	4.9 (2.7-8.2)	4.6 (2.4-7.7)	4.3 (2.2-7.2)
3	39 (31-47)	28 (22-37)	21 (15-29)	16 (10-24)	12 (7.4-20)	9.9 (5.6-17)	8.5 (4.5-15)	7.7 (3.9-14)	7.0 (3.5-13)	6.5 (3.2-12)	6.1 (2.9-11)
4	51 (40-59)	38 (29-46)	29 (21-37)	22 (16-30)	17 (12-25)	14 (9.2-21)	12 (7.3-19)	11 (6.3-18)	9.9 (5.6-16)	9.2 (5.1-15)	8.6 (4.7-15)
5	65 (58-70)	51 (44-55)	39 (33-44)	30 (25-36)	24 (19-30)	19 (16-25)	16 (13-22)	15 (11-21)	14 (9.7-19)	13 (8.8-18)	12 (8.1-17)
6	77	63	50	40	32	26	22	20	19	17	16

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

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	10	7.5	5.7	4.4	3.5	3.0	2.7	2.4	2.2	2.0
1	21 (19-24)	15 (13-17)	11 (9.2-12)	8.3 (6.6-9.9)	6.4 (4.9-8.1)	5.1 (3.7-6.7)	4.4 (3.1-6.0)	4.0 (2.7-5.4)	3.6 (2.4-5.0)	3.3 (2.1-4.6)	3.0 (2.0-4.3)
2	29 (25-36)	21 (18-27)	16 (12-20)	12 (8.7-16)	9.3 (6.3-13)	7.4 (4.7-11)	6.4 (3.9-10)	5.7 (3.3-9.1)	5.2 (2.9-8.4)	4.7 (2.6-7.8)	4.3 (2.3-7.2)
3	40 (32-47)	30 (24-38)	22 (17-31)	17 (12-25)	13 (8.4-21)	11 (6.3-17)	9.1 (5.1-16)	8.1 (4.3-14)	7.3 (3.8-13)	6.7 (3.3-12)	6.2 (3.0-11)
4	51 (42-57)	40 (31-47)	30 (23-38)	23 (17-31)	18 (13-26)	15 (10-22)	13 (8.2-20)	11 (6.9-18)	10 (6.0-17)	9.3 (5.3-15)	8.6 (4.8-14)
5	63 (58-68)	51 (45-56)	40 (35-46)	31 (27-38)	25 (21-31)	20 (17-26)	17 (14-23)	15 (11-21)	14 (10-19)	13 (8.9-18)	12 (8.0-17)
6	74	62	51	41	33	27	23	21	19	17	16

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	15	11	8.1	6.1	4.7	3.7	3.2	2.8	2.5	2.2	2.0
1	23 (20-27)	16 (14-20)	12 (9.9-14)	8.8 (7.1-11)	6.7 (5.2-7.9)	5.3 (4.0-6.2)	4.5 (3.3-5.2)	3.9 (2.8-4.5)	3.4 (2.4-4.0)	3.0 (2.1-3.6)	2.7 (1.9-3.3)
2	32 (26-40)	24 (19-30)	17 (13-22)	13 (9.5-17)	9.5 (6.8-13)	7.5 (5.2-9.9)	6.3 (4.2-8.4)	5.4 (3.5-7.3)	4.7 (3.0-6.4)	4.1 (2.6-5.7)	3.7 (2.3-5.1)
3	44 (35-54)	33 (25-43)	25 (18-33)	18 (13-25)	14 (9.2-19)	11 (6.9-16)	8.7 (5.5-13)	7.4 (4.6-11)	6.4 (3.9-10)	5.6 (3.3-8.9)	5.0 (2.9-8.0)
4	57 (48-65)	45 (36-53)	34 (27-41)	26 (19-32)	19 (14-25)	15 (11-20)	12 (8.7-17)	10 (7.2-15)	8.7 (6.1-13)	7.6 (5.2-11)	6.7 (4.6-10)
5	69 (62-74)	58 (50-63)	46 (39-51)	35 (29-40)	27 (22-31)	21 (17-25)	17 (14-21)	14 (11-18)	12 (9.7-15)	10 (8.5-14)	9.0 (7.4-12)
6	78	70	59	47	36	28	23	19	16	14	12

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

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	16	11	8.5	6.4	4.9	4.0	3.3	2.9	2.5	2.2	1.9
1	24 (19-39)	18 (14-29)	13 (10-21)	9.8 (7.3-15)	7.3 (5.4-11)	5.8 (4.3-8.0)	4.8 (3.5-6.1)	4.0 (2.9-4.8)	3.4 (2.4-3.9)	2.9 (2.1-3.5)	2.6 (1.8-3.1)
2	36 (25-53)	27 (19-42)	20 (13-32)	15 (9.9-23)	11 (7.2-17)	8.6 (5.6-13)	6.9 (4.5-9.8)	5.6 (3.7-7.7)	4.7 (3.0-6.2)	4.0 (2.6-5.3)	3.4 (2.2-4.7)
3	49 (34-64)	39 (25-53)	30 (18-41)	22 (13-32)	16 (9.7-24)	13 (7.5-18)	9.9 (6.0-14)	7.9 (4.8-11)	6.5 (4.0-9.3)	5.4 (3.4-7.7)	4.6 (2.9-6.5)
4	62 (44-72)	52 (34-63)	42 (25-52)	32 (19-41)	24 (14-31)	19 (11-24)	14 (9.0-19)	11 (7.4-15)	9.1 (6.2-12)	7.4 (5.2-10)	6.1 (4.5-8.4)
5	73 (55-78)	65 (45-71)	55 (36-62)	45 (28-51)	35 (21-40)	27 (17-31)	21 (14-25)	16 (11-20)	13 (9.4-16)	10 (8.0-13)	8.3 (6.9-11)
6	81	75	68	58	47	38	30	23	18	14	11

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	14	11	8.4	6.4	5.1	4.2	3.6	3.1	2.6	2.3	2.0
1	22 (17-35)	17 (13-27)	13 (9.4-20)	9.6 (7.1-15)	7.5 (5.5-11)	6.1 (4.4-8.6)	5.0 (3.6-6.8)	4.2 (3.0-5.4)	3.6 (2.5-4.3)	3.1 (2.2-3.5)	2.6 (1.9-3.0)
2	32 (22-47)	25 (17-38)	19 (13-29)	14 (9.5-22)	11 (7.3-17)	8.8 (5.8-13)	7.2 (4.7-10)	5.9 (3.9-8.3)	4.9 (3.2-6.7)	4.1 (2.7-5.4)	3.5 (2.3-4.6)
3	43 (29-58)	35 (22-48)	27 (17-38)	21 (13-30)	16 (9.7-23)	13 (7.8-18)	10 (6.3-14)	8.3 (5.1-12)	6.8 (4.2-9.5)	5.6 (3.6-7.9)	4.7 (3.0-6.6)
4	55 (37-66)	46 (29-57)	38 (23-48)	30 (17-38)	23 (13-30)	18 (11-24)	15 (8.9-19)	12 (7.4-15)	9.5 (6.2-13)	7.7 (5.3-10)	6.4 (4.5-8.6)
5	66 (47-72)	58 (39-65)	50 (31-56)	41 (24-46)	33 (19-38)	26 (16-31)	21 (13-25)	17 (11-20)	13 (9.1-16)	11 (7.7-13)	8.7 (6.6-11)
6	76	70	62	53	44	36	29	23	19	15	12

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

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	13	10	8.0	6.3	5.2	4.4	3.8	3.2	2.8	2.4	2.1
1	19 (14-29)	15 (11-23)	12 (8.3-18)	9.0 (6.4-14)	7.5 (5.3-11)	6.2 (4.4-8.8)	5.2 (3.7-7.1)	4.4 (3.1-5.8)	3.8 (2.6-4.7)	3.2 (2.2-3.9)	2.8 (1.9-3.2)
2	26 (18-38)	21 (14-31)	17 (11-25)	13 (8.5-20)	11 (6.9-16)	8.8 (5.7-13)	7.3 (4.7-10)	6.1 (3.9-8.6)	5.1 (3.3-7.0)	4.4 (2.8-5.8)	3.7 (2.4-4.8)
3	36 (24-48)	29 (19-40)	23 (15-33)	19 (11-26)	15 (9.3-21)	13 (7.6-17)	10 (6.3-14)	8.5 (5.2-12)	7.1 (4.4-9.9)	5.9 (3.7-8.3)	5.0 (3.1-7.0)
4	46 (30-56)	39 (25-49)	32 (20-41)	26 (16-33)	21 (13-28)	18 (11-23)	14 (9.0-19)	12 (7.5-16)	9.8 (6.3-13)	8.1 (5.3-11)	6.7 (4.5-9.1)
5	57 (39-64)	50 (32-56)	42 (26-49)	35 (21-41)	29 (18-35)	24 (15-29)	20 (13-24)	17 (11-20)	14 (9.0-17)	11 (7.7-14)	9.2 (6.6-12)
6	67	61	53	46	39	33	28	23	19	15	13

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	11	9.0	7.2	5.9	5.1	4.4	3.7	3.2	2.8	2.4	2.1
1	16 (11-23)	13 (8.7-19)	10 (7.0-15)	8.3 (5.7-12)	7.1 (4.8-10)	6.0 (4.1-8.5)	5.1 (3.5-7.1)	4.4 (3.0-5.9)	3.8 (2.5-4.9)	3.2 (2.2-4.1)	2.8 (1.9-3.4)
2	21 (14-31)	18 (12-25)	14 (9.2-21)	12 (7.5-17)	9.9 (6.3-14)	8.4 (5.3-12)	7.1 (4.5-10)	6.0 (3.8-8.4)	5.1 (3.2-7.1)	4.4 (2.8-5.9)	3.7 (2.4-5.0)
3	29 (19-39)	24 (15-33)	20 (12-27)	16 (10-23)	14 (8.4-19)	12 (7.1-16)	9.9 (6.0-14)	8.4 (5.1-12)	7.1 (4.3-9.9)	6.0 (3.7-8.4)	5.1 (3.1-7.1)
4	38 (24-47)	32 (20-41)	27 (16-34)	22 (13-29)	19 (11-25)	16 (9.7-21)	14 (8.2-18)	12 (7.0-15)	9.8 (6.0-13)	8.2 (5.1-11)	6.9 (4.3-9.4)
5	48 (31-55)	41 (26-48)	36 (22-42)	30 (18-36)	26 (16-32)	22 (13-27)	19 (11-23)	16 (9.9-20)	13 (8.5-17)	11 (7.3-14)	9.5 (6.3-12)
6	58	52	46	40	35	30	26	22	19	16	13