

Taiwan - 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 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 Taiwan. 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	19	12	7.8	5.4	4.0	3.1	2.6	2.2	2.0	1.9	1.8
1	28 (23-36)	18 (16-23)	12 (10-15)	8.2 (6.8-10)	6.0 (4.7-7.6)	4.7 (3.4-5.9)	3.9 (2.7-5.0)	3.3 (2.2-4.4)	2.9 (1.9-4.0)	2.8 (1.8-3.9)	2.7 (1.7-3.7)
2	40 (31-53)	27 (21-37)	18 (14-25)	12 (9.2-17)	9.0 (6.2-13)	7.0 (4.4-11)	5.7 (3.3-9.3)	4.8 (2.7-8.2)	4.3 (2.3-7.5)	4.1 (2.1-7.2)	3.9 (2.0-6.9)
3	53 (40-66)	37 (27-48)	26 (19-33)	18 (13-25)	13 (8.3-20)	10 (5.8-17)	8.3 (4.4-15)	7.0 (3.5-13)	6.3 (3.0-12)	5.9 (2.8-11)	5.7 (2.6-11)
4	67 (53-78)	50 (36-61)	36 (25-43)	25 (17-32)	19 (12-26)	15 (9.6-22)	12 (7.2-19)	10 (5.7-16)	8.9 (4.8-15)	8.4 (4.4-14)	8.0 (4.1-14)
5	78 (70-84)	63 (53-71)	48 (38-53)	35 (27-40)	26 (20-32)	20 (15-26)	16 (12-22)	14 (10-19)	12 (9.0-17)	12 (8.2-17)	11 (7.7-16)
6	86	76	60	46	35	27	22	19	17	16	15

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

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	22	14	9.7	6.9	5.1	4.0	3.2	2.7	2.4	2.3	2.2
1	32 (27-38)	21 (19-26)	14 (13-18)	10 (8.5-13)	7.6 (5.9-9.3)	5.9 (4.3-7.3)	4.8 (3.4-6.2)	4.0 (2.7-5.4)	3.6 (2.4-5.0)	3.4 (2.2-4.7)	3.2 (2.0-4.5)
2	43 (35-55)	30 (24-40)	21 (17-28)	15 (11-20)	11 (7.9-16)	8.7 (5.6-13)	7.0 (4.2-11)	5.9 (3.3-9.6)	5.3 (2.9-8.9)	4.9 (2.6-8.4)	4.7 (2.4-8.0)
3	56 (45-67)	41 (32-51)	29 (22-38)	21 (16-30)	16 (11-24)	12 (7.5-20)	10 (5.6-17)	8.4 (4.4-15)	7.6 (3.8-14)	7.0 (3.4-13)	6.7 (3.1-12)
4	68 (57-76)	53 (41-62)	40 (29-47)	29 (21-37)	22 (16-30)	17 (12-25)	14 (9.0-22)	12 (7.0-19)	11 (6.0-17)	9.9 (5.4-17)	9.3 (4.9-16)
5	78 (72-83)	66 (57-72)	52 (43-56)	39 (32-45)	30 (24-37)	24 (19-30)	19 (15-26)	16 (13-22)	15 (11-20)	14 (9.6-19)	13 (8.8-18)
6	85	76	63	51	40	32	26	22	20	18	17

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	23	16	11	8.4	6.3	5.0	4.0	3.3	3.0	2.8	2.6
1	33 (30-38)	23 (21-27)	17 (15-20)	12 (10-14)	9.3 (7.3-11)	7.3 (5.4-9.0)	5.9 (4.2-7.6)	4.9 (3.4-6.5)	4.4 (3.0-6.1)	4.1 (2.7-5.7)	3.8 (2.4-5.3)
2	44 (36-53)	32 (27-40)	24 (19-30)	17 (14-22)	13 (9.7-18)	10 (7.1-15)	8.5 (5.3-13)	7.1 (4.2-11)	6.4 (3.6-10)	5.9 (3.2-9.8)	5.5 (2.9-9.2)
3	55 (46-64)	43 (34-51)	32 (25-41)	24 (18-33)	19 (13-27)	15 (9.4-23)	12 (7.1-20)	10 (5.5-17)	9.0 (4.7-16)	8.3 (4.2-15)	7.7 (3.8-14)
4	66 (57-73)	54 (44-61)	42 (33-50)	33 (25-41)	26 (19-34)	20 (15-29)	17 (11-25)	14 (8.7-22)	12 (7.4-20)	11 (6.5-19)	11 (5.9-18)
5	75 (69-78)	65 (58-69)	53 (46-58)	42 (36-49)	34 (28-41)	27 (22-34)	22 (18-29)	19 (15-25)	17 (13-23)	16 (11-22)	15 (10-21)
6	81	73	63	53	43	35	29	25	22	21	19

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

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	24	18	13	9.6	7.4	5.8	4.7	3.9	3.5	3.1	2.9
1	33 (31-37)	25 (22-28)	18 (16-21)	14 (12-16)	11 (8.5-12)	8.4 (6.4-10)	6.7 (4.9-8.6)	5.6 (4.0-7.4)	5.0 (3.4-6.8)	4.5 (3.0-6.3)	4.2 (2.7-5.8)
2	43 (36-50)	33 (28-40)	25 (21-31)	19 (15-24)	15 (11-20)	12 (8.4-17)	9.6 (6.3-14)	8.0 (5.0-12)	7.1 (4.2-11)	6.5 (3.7-10)	5.9 (3.3-9.8)
3	53 (45-61)	43 (35-50)	34 (27-41)	26 (21-35)	21 (15-29)	16 (11-25)	13 (8.4-21)	11 (6.6-18)	10 (5.6-17)	9.0 (4.8-16)	8.3 (4.3-15)
4	63 (56-69)	53 (45-59)	43 (35-50)	34 (27-43)	28 (21-36)	22 (17-31)	18 (13-26)	15 (10-23)	14 (8.6-21)	12 (7.4-20)	11 (6.6-19)
5	71 (66-75)	62 (57-67)	53 (47-59)	44 (38-50)	36 (31-43)	29 (25-36)	24 (20-31)	20 (17-27)	18 (14-25)	17 (12-23)	15 (11-22)
6	77	70	62	53	44	37	31	26	24	22	20

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	24	18	14	11	8.3	6.5	5.2	4.4	3.9	3.4	3.1
1	34 (30-41)	26 (22-32)	20 (17-24)	15 (13-19)	12 (9.5-14)	9.3 (7.2-11)	7.4 (5.6-8.9)	6.2 (4.5-7.4)	5.4 (3.9-6.3)	4.7 (3.3-5.6)	4.2 (2.9-5.0)
2	45 (38-54)	36 (29-44)	28 (22-35)	22 (17-28)	17 (13-22)	13 (9.6-17)	10 (7.3-14)	8.6 (5.9-12)	7.4 (4.9-10)	6.5 (4.2-8.9)	5.8 (3.6-8.0)
3	56 (48-64)	47 (38-56)	38 (30-47)	30 (22-39)	23 (17-31)	18 (13-25)	14 (9.8-21)	12 (7.8-17)	10 (6.5-15)	8.8 (5.5-13)	7.8 (4.7-12)
4	66 (58-72)	58 (49-65)	49 (40-56)	40 (32-48)	32 (24-39)	25 (19-32)	20 (15-26)	16 (12-22)	14 (9.7-19)	12 (8.2-17)	10 (7.1-15)
5	73 (68-78)	67 (60-72)	59 (52-65)	50 (43-57)	42 (35-48)	34 (28-40)	27 (22-33)	22 (18-27)	19 (15-24)	16 (13-21)	14 (11-18)
6	79	74	68	61	52	43	35	29	25	21	18

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

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	23	18	14	11	9.0	7.2	5.8	4.9	4.3	3.8	3.4
1	34 (27-53)	27 (21-44)	22 (17-35)	17 (13-28)	14 (10-21)	11 (7.8-16)	8.5 (6.1-13)	7.1 (5.1-10)	6.0 (4.3-8.1)	5.2 (3.7-6.6)	4.6 (3.2-5.5)
2	46 (34-63)	38 (28-54)	31 (22-46)	25 (17-38)	20 (13-30)	16 (10-24)	12 (8.1-19)	10 (6.6-15)	8.6 (5.5-12)	7.3 (4.7-10)	6.3 (4.0-8.3)
3	57 (43-71)	50 (36-64)	43 (29-56)	35 (23-48)	29 (18-40)	23 (14-32)	18 (11-26)	15 (8.9-21)	12 (7.4-18)	10 (6.2-15)	8.6 (5.3-12)
4	68 (53-77)	61 (45-71)	54 (38-65)	47 (31-57)	39 (25-49)	32 (20-41)	26 (16-33)	21 (13-28)	17 (11-23)	14 (9.0-19)	12 (7.7-16)
5	76 (62-81)	71 (54-77)	65 (47-72)	58 (40-65)	51 (33-58)	43 (27-50)	36 (22-42)	30 (18-35)	24 (16-29)	20 (13-25)	17 (12-21)
6	81	79	74	69	62	55	47	40	33	28	23

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	20	16	13	11	8.8	7.2	5.9	5.1	4.5	3.9	3.5
1	29 (22-46)	24 (18-39)	20 (15-32)	16 (12-26)	13 (9.4-21)	11 (7.5-17)	8.6 (6.1-13)	7.4 (5.2-11)	6.3 (4.4-9.1)	5.5 (3.8-7.5)	4.8 (3.3-6.3)
2	39 (29-56)	33 (24-49)	28 (19-41)	23 (16-35)	19 (13-29)	15 (10-23)	13 (8.2-19)	11 (6.9-16)	9.0 (5.8-13)	7.7 (4.9-11)	6.6 (4.2-9.2)
3	50 (36-64)	44 (30-57)	38 (25-51)	32 (21-44)	27 (17-37)	22 (14-31)	18 (11-25)	15 (9.2-21)	13 (7.7-18)	11 (6.6-15)	9.2 (5.6-13)
4	60 (44-70)	54 (38-65)	48 (32-59)	42 (27-52)	36 (22-46)	30 (18-39)	25 (15-32)	21 (13-28)	18 (11-23)	15 (9.2-20)	13 (7.9-17)
5	69 (53-75)	64 (46-71)	59 (40-65)	53 (34-60)	46 (29-53)	40 (24-46)	34 (20-40)	29 (17-35)	25 (15-30)	21 (13-25)	18 (11-22)
6	76	73	69	63	57	51	44	39	33	28	24

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

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	16	13	11	9.0	7.5	6.2	5.3	4.6	4.1	3.6	3.2
1	23 (17-37)	19 (14-31)	16 (12-27)	13 (9.6-22)	11 (7.9-18)	9.2 (6.5-15)	7.8 (5.4-12)	6.7 (4.7-10)	5.8 (4.0-8.8)	5.1 (3.5-7.5)	4.4 (3.0-6.3)
2	32 (22-46)	27 (19-41)	23 (15-35)	19 (13-29)	16 (11-25)	13 (8.7-21)	11 (7.3-17)	9.8 (6.3-15)	8.4 (5.4-13)	7.3 (4.6-11)	6.3 (4.0-9.1)
3	42 (28-55)	37 (24-49)	32 (20-44)	27 (17-38)	23 (14-33)	19 (12-28)	16 (9.8-23)	14 (8.4-20)	12 (7.2-17)	10 (6.2-15)	8.9 (5.3-13)
4	52 (36-63)	47 (31-57)	42 (27-52)	37 (22-46)	32 (19-41)	27 (16-35)	23 (13-30)	20 (12-26)	17 (10-22)	15 (8.6-19)	13 (7.5-17)
5	62 (44-68)	57 (39-64)	52 (34-59)	47 (29-54)	41 (25-48)	36 (21-42)	31 (18-37)	27 (16-33)	24 (14-29)	21 (12-25)	18 (10-22)
6	70	67	62	58	52	47	41	37	32	28	24

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	10	8.6	7.3	6.1	5.2	4.4	3.8	3.4	3.0	2.6	2.3
1	15 (11-25)	13 (9.1-22)	11 (7.7-18)	9.2 (6.4-16)	7.8 (5.4-13)	6.5 (4.5-11)	5.7 (3.9-9.4)	5.0 (3.4-8.1)	4.4 (3.0-7.0)	3.9 (2.6-6.1)	3.4 (2.3-5.3)
2	22 (14-33)	19 (12-29)	16 (10-25)	14 (8.7-21)	12 (7.3-18)	9.8 (6.1-15)	8.5 (5.3-13)	7.4 (4.6-12)	6.5 (4.0-10)	5.7 (3.5-8.7)	5.0 (3.1-7.6)
3	30 (19-42)	26 (16-37)	23 (14-33)	20 (12-28)	17 (10-24)	14 (8.4-21)	12 (7.2-18)	11 (6.3-16)	9.5 (5.5-14)	8.3 (4.8-12)	7.2 (4.2-10)
4	40 (25-50)	35 (21-45)	31 (18-40)	27 (16-36)	24 (13-31)	20 (11-27)	18 (9.9-24)	16 (8.6-21)	14 (7.6-18)	12 (6.7-16)	11 (5.9-14)
5	50 (32-57)	46 (28-52)	41 (24-48)	37 (21-43)	33 (18-38)	28 (15-34)	25 (13-30)	22 (12-27)	20 (10-24)	17 (9.2-21)	15 (8.1-18)
6	60	56	52	47	43	38	34	31	27	24	21