

Taiwan - 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 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	16	10	7.1	5.1	4.0	3.3	2.8	2.5	2.4	2.3	2.2
1	25 (21-31)	16 (14-20)	11 (9.1-14)	7.8 (6.2-9.8)	6.1 (4.5-7.6)	4.9 (3.5-6.4)	4.2 (2.8-5.6)	3.8 (2.5-5.2)	3.6 (2.3-5.0)	3.4 (2.2-4.8)	3.3 (2.1-4.6)
2	36 (28-48)	24 (19-33)	16 (12-23)	12 (8.1-17)	9.0 (5.7-14)	7.3 (4.3-12)	6.2 (3.4-10)	5.6 (3.0-9.5)	5.3 (2.8-9.1)	5.0 (2.6-8.7)	4.8 (2.5-8.4)
3	49 (36-64)	34 (25-44)	24 (17-33)	17 (11-26)	13 (7.6-22)	11 (5.7-19)	9.0 (4.5-16)	8.1 (3.9-15)	7.6 (3.6-14)	7.3 (3.4-14)	7.0 (3.2-13)
4	64 (48-77)	47 (33-56)	33 (23-41)	24 (16-33)	19 (13-28)	15 (9.4-24)	13 (7.4-21)	12 (6.3-19)	11 (5.8-18)	10 (5.4-18)	10 (5.2-17)
5	78 (69-86)	61 (50-68)	45 (36-50)	34 (26-40)	26 (20-33)	21 (16-28)	18 (14-24)	16 (12-22)	15 (11-21)	14 (10-20)	14 (9.5-20)
6	89	75	59	45	36	29	24	22	21	20	19

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	20	13	9.4	7.0	5.5	4.4	3.7	3.4	3.2	3.0	2.8
1	29 (26-34)	20 (18-24)	14 (12-17)	10 (8.3-13)	8.2 (6.1-10)	6.6 (4.7-8.6)	5.5 (3.8-7.4)	5.1 (3.4-6.9)	4.7 (3.1-6.6)	4.5 (2.9-6.2)	4.2 (2.7-5.9)
2	41 (34-53)	29 (24-38)	21 (16-27)	15 (11-21)	12 (7.8-18)	9.7 (5.9-15)	8.1 (4.7-13)	7.4 (4.1-12)	6.9 (3.7-12)	6.5 (3.4-11)	6.2 (3.2-11)
3	55 (43-67)	40 (31-50)	29 (21-40)	22 (15-33)	17 (10-28)	14 (7.8-24)	12 (6.1-21)	11 (5.3-19)	9.9 (4.8-18)	9.3 (4.4-17)	8.9 (4.2-17)
4	69 (55-79)	53 (40-61)	40 (29-49)	31 (22-41)	24 (17-35)	20 (13-30)	16 (10-26)	15 (8.6-24)	14 (7.8-23)	13 (7.2-22)	12 (6.7-21)
5	82 (74-87)	67 (58-73)	53 (44-59)	41 (34-48)	33 (27-41)	27 (22-35)	23 (18-30)	21 (15-28)	19 (14-27)	18 (13-25)	17 (12-24)
6	90	80	66	54	43	36	30	28	26	24	23

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	24	17	12	9.3	7.2	5.8	5.0	4.5	4.1	3.8	3.6
1	34 (32-39)	25 (22-28)	18 (15-21)	14 (11-16)	11 (8.1-13)	8.6 (6.2-11)	7.3 (5.1-9.8)	6.6 (4.5-9.1)	6.1 (4.1-8.5)	5.7 (3.7-7.9)	5.3 (3.5-7.5)
2	47 (40-58)	35 (29-44)	26 (20-33)	20 (14-27)	15 (10-22)	12 (7.8-19)	11 (6.3-17)	9.6 (5.5-15)	8.8 (4.9-14)	8.2 (4.4-14)	7.7 (4.1-13)
3	61 (50-70)	47 (38-58)	36 (27-48)	27 (19-40)	22 (14-34)	18 (10-29)	15 (8.2-26)	14 (7.1-24)	13 (6.3-22)	12 (5.7-21)	11 (5.3-20)
4	74 (62-81)	60 (47-68)	47 (36-58)	37 (28-49)	30 (22-42)	24 (17-36)	21 (13-32)	19 (11-30)	17 (10-28)	16 (9.1-26)	15 (8.4-25)
5	84 (79-88)	73 (66-77)	60 (53-66)	49 (42-57)	40 (33-48)	33 (27-42)	28 (22-37)	26 (19-34)	24 (17-32)	22 (16-30)	21 (14-29)
6	91	83	73	61	51	43	37	34	31	29	28

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	29	21	15	12	8.9	7.1	6.2	5.5	5.0	4.5	4.1
1	40 (37-44)	29 (26-33)	22 (19-24)	17 (14-19)	13 (10-16)	10 (7.7-13)	9.0 (6.4-12)	8.0 (5.5-11)	7.2 (4.9-10)	6.6 (4.4-9.2)	6.1 (4.0-8.5)
2	52 (46-61)	40 (34-48)	30 (25-38)	23 (18-31)	18 (13-26)	15 (9.7-22)	13 (7.9-19)	11 (6.7-18)	10 (5.9-16)	9.4 (5.2-15)	8.7 (4.7-14)
3	65 (56-73)	52 (44-63)	41 (32-53)	32 (23-45)	26 (17-38)	21 (13-32)	18 (10-29)	16 (8.8-27)	14 (7.6-25)	13 (6.8-23)	12 (6.1-22)
4	77 (67-81)	65 (54-72)	53 (42-63)	43 (33-54)	34 (26-46)	28 (20-40)	24 (17-36)	22 (14-34)	20 (12-31)	18 (11-29)	17 (9.7-27)
5	85 (82-88)	76 (71-80)	65 (59-71)	54 (48-62)	45 (39-54)	37 (32-46)	33 (26-42)	29 (23-39)	27 (20-36)	25 (18-33)	23 (16-31)
6	90	84	76	66	56	47	42	38	35	32	30

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	33	24	18	14	11	8.6	7.4	6.5	5.7	5.1	4.6
1	45 (41-52)	34 (30-40)	26 (22-30)	20 (16-23)	15 (12-18)	12 (9.3-14)	10 (7.7-12)	8.9 (6.5-10)	7.9 (5.7-9.3)	7.0 (5.0-8.3)	6.3 (4.4-7.5)
2	59 (51-69)	47 (39-57)	36 (29-45)	28 (21-35)	21 (16-27)	17 (12-22)	14 (9.7-19)	12 (8.1-16)	11 (6.9-14)	9.5 (6.0-13)	8.6 (5.3-12)
3	72 (63-81)	60 (49-71)	48 (37-60)	38 (28-49)	29 (21-40)	23 (16-33)	20 (13-29)	17 (11-25)	15 (9.0-22)	13 (7.8-20)	11 (6.9-18)
4	82 (76-87)	73 (64-80)	62 (51-70)	50 (40-59)	40 (31-49)	32 (24-41)	26 (20-36)	22 (17-31)	19 (14-28)	17 (12-25)	15 (11-23)
5	88 (85-90)	83 (78-86)	74 (67-79)	63 (56-69)	52 (45-58)	42 (36-49)	35 (30-42)	30 (25-37)	26 (22-33)	23 (19-29)	20 (17-27)
6	90	88	83	75	65	54	46	39	34	29	26

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	35	27	21	16	12	10	8.8	7.6	6.6	5.8	5.2
1	49 (42-69)	39 (32-57)	30 (24-44)	23 (18-33)	18 (14-25)	15 (11-19)	12 (9.1-15)	10 (7.7-12)	8.9 (6.5-10)	7.7 (5.7-9.1)	6.8 (4.9-8.1)
2	63 (52-80)	53 (41-71)	43 (31-60)	34 (24-48)	26 (18-37)	21 (14-30)	17 (12-24)	14 (9.6-19)	12 (8.1-16)	10 (6.9-14)	9.0 (6.0-12)
3	75 (63-85)	67 (51-79)	57 (40-71)	46 (31-60)	37 (23-49)	29 (19-40)	24 (15-33)	20 (13-27)	16 (11-23)	14 (9.0-19)	12 (7.8-16)
4	83 (73-89)	78 (63-85)	70 (52-79)	60 (42-71)	49 (33-60)	41 (27-50)	33 (22-42)	27 (19-35)	22 (16-29)	19 (14-25)	16 (12-21)
5	88 (80-90)	85 (74-88)	80 (66-85)	73 (56-78)	63 (46-69)	54 (38-60)	45 (32-51)	37 (28-43)	30 (24-36)	25 (21-30)	21 (18-26)
6	89	89	86	82	76	67	58	49	40	33	28

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	34	27	21	17	13	11	9.7	8.3	7.2	6.2	5.5
1	46 (39-64)	38 (31-54)	30 (24-44)	24 (18-35)	19 (15-27)	16 (12-22)	13 (9.9-17)	11 (8.3-14)	9.6 (7.0-11)	8.3 (6.0-9.4)	7.2 (5.2-8.3)
2	59 (47-74)	50 (39-66)	41 (31-57)	33 (24-47)	27 (19-39)	22 (15-32)	18 (13-26)	15 (10-21)	13 (8.8-17)	11 (7.4-14)	9.5 (6.3-12)
3	69 (57-80)	62 (48-75)	53 (39-67)	45 (31-58)	37 (24-48)	31 (20-41)	25 (16-34)	21 (14-29)	18 (11-24)	15 (9.7-20)	13 (8.3-17)
4	77 (66-84)	72 (57-80)	65 (48-74)	57 (40-67)	48 (32-58)	41 (27-50)	34 (23-42)	29 (19-36)	24 (16-30)	20 (14-26)	17 (12-22)
5	83 (73-86)	79 (67-84)	74 (59-80)	68 (51-74)	60 (43-67)	53 (37-59)	45 (32-52)	38 (27-44)	32 (24-38)	26 (20-32)	22 (18-27)
6	86	84	81	77	71	64	57	49	42	35	29

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	29	23	19	15	12	10	8.9	7.6	6.5	5.6	4.9
1	39 (31-55)	32 (25-46)	26 (20-38)	21 (16-30)	17 (13-25)	15 (11-20)	12 (8.9-17)	10 (7.5-14)	8.9 (6.3-11)	7.6 (5.4-9.2)	6.5 (4.6-7.6)
2	50 (39-65)	43 (32-57)	35 (26-49)	29 (20-41)	24 (17-35)	20 (14-29)	17 (11-24)	14 (9.6-20)	12 (8.0-17)	10 (6.8-14)	8.7 (5.7-11)
3	61 (48-73)	54 (40-66)	46 (33-59)	39 (26-51)	33 (22-44)	28 (18-37)	24 (15-32)	20 (13-27)	17 (11-23)	14 (8.9-19)	12 (7.5-16)
4	70 (56-78)	64 (49-73)	57 (41-67)	50 (34-60)	43 (29-53)	37 (24-46)	32 (21-40)	27 (18-34)	23 (15-29)	19 (13-25)	16 (11-21)
5	77 (65-81)	73 (58-78)	67 (51-73)	61 (44-67)	55 (38-61)	48 (33-55)	42 (28-48)	36 (24-42)	30 (21-36)	25 (18-31)	21 (16-26)
6	81	79	76	71	65	59	53	46	40	34	28

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	19	16	13	10	8.8	7.5	6.4	5.5	4.7	4.0	3.5
1	27 (20-40)	22 (16-33)	18 (13-27)	15 (11-22)	13 (8.9-19)	11 (7.5-16)	9.0 (6.3-13)	7.7 (5.4-11)	6.5 (4.5-8.9)	5.5 (3.8-7.3)	4.7 (3.3-6.1)
2	36 (26-50)	30 (21-43)	25 (17-36)	21 (14-30)	18 (12-26)	15 (9.9-22)	13 (8.3-18)	11 (7.0-15)	9.1 (5.9-13)	7.7 (4.9-11)	6.5 (4.2-9.0)
3	46 (33-59)	40 (28-52)	34 (22-45)	29 (18-39)	25 (16-34)	21 (13-29)	18 (11-24)	15 (9.3-21)	13 (7.8-18)	11 (6.6-15)	9.0 (5.5-13)
4	57 (41-66)	51 (35-61)	44 (29-54)	38 (24-48)	33 (21-42)	29 (18-36)	25 (15-31)	21 (13-27)	18 (11-23)	15 (9.3-19)	12 (7.9-16)
5	66 (50-72)	61 (44-67)	55 (38-62)	49 (32-56)	44 (28-50)	38 (24-45)	33 (21-39)	29 (18-34)	24 (15-29)	21 (13-25)	17 (11-21)
6	73	70	65	60	55	49	44	38	33	28	24