

## Australia - 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 Australia. 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/m<sup>2</sup>.

**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	6.9	4.4	3.0	2.2	1.7	1.4	1.2	1.1	1.0	1.0	0.9
1	11 (9.4-14)	6.8 (5.9-8.7)	4.6 (3.8-5.8)	3.3 (2.6-4.2)	2.6 (1.9-3.2)	2.1 (1.5-2.7)	1.8 (1.2-2.4)	1.6 (1.1-2.2)	1.5 (1.0-2.1)	1.4 (0.9-2.0)	1.4 (0.9-2.0)
2	16 (13-24)	10 (8.1-15)	7.0 (5.2-10)	5.0 (3.4-7.3)	3.9 (2.4-6.0)	3.1 (1.8-5.1)	2.6 (1.5-4.5)	2.4 (1.3-4.1)	2.3 (1.2-3.9)	2.2 (1.1-3.8)	2.1 (1.1-3.6)
3	24 (17-34)	16 (11-21)	10 (7.2-15)	7.5 (4.6-12)	5.7 (3.2-9.8)	4.6 (2.4-8.3)	3.9 (1.9-7.2)	3.5 (1.6-6.7)	3.3 (1.5-6.4)	3.1 (1.4-6.1)	3.0 (1.4-5.9)
4	35 (23-46)	23 (15-29)	15 (10-20)	11 (7.1-16)	8.3 (5.4-13)	6.7 (4.0-11)	5.6 (3.2-9.3)	5.0 (2.7-8.5)	4.7 (2.5-8.1)	4.5 (2.3-7.8)	4.3 (2.2-7.5)
5	48 (38-58)	32 (25-38)	22 (17-25)	16 (12-19)	12 (9.0-15)	9.5 (7.2-13)	8.0 (6.0-11)	7.1 (5.1-10)	6.7 (4.7-9.6)	6.4 (4.3-9.2)	6.1 (4.1-8.8)
6	63	45	31	22	17	13	11	9.9	9.3	8.9	8.5

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

**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	8.0	5.3	3.7	2.7	2.1	1.7	1.5	1.3	1.2	1.2	1.1
1	12 (11-15)	8.1 (7.1-9.8)	5.6 (4.7-6.8)	4.2 (3.3-5.1)	3.2 (2.4-4.0)	2.6 (1.8-3.4)	2.2 (1.5-3.0)	2.0 (1.3-2.8)	1.9 (1.2-2.6)	1.8 (1.1-2.5)	1.7 (1.1-2.3)
2	18 (15-25)	12 (9.7-17)	8.5 (6.4-12)	6.2 (4.3-8.8)	4.8 (3.1-7.3)	3.9 (2.3-6.2)	3.2 (1.8-5.3)	3.0 (1.6-5.0)	2.8 (1.5-4.7)	2.6 (1.4-4.4)	2.4 (1.3-4.2)
3	26 (19-35)	18 (13-24)	12 (8.7-18)	9.2 (5.8-14)	7.1 (4.1-12)	5.7 (3.1-10)	4.7 (2.4-8.6)	4.3 (2.1-8.0)	4.0 (1.9-7.6)	3.8 (1.8-7.2)	3.6 (1.6-6.8)
4	37 (26-47)	26 (18-31)	18 (12-23)	13 (8.9-19)	10 (6.9-15)	8.2 (5.2-13)	6.8 (4.0-11)	6.2 (3.5-10)	5.7 (3.1-9.7)	5.4 (2.9-9.2)	5.1 (2.7-8.7)
5	50 (42-58)	36 (29-40)	25 (20-29)	19 (15-23)	14 (11-18)	12 (9.0-15)	9.6 (7.3-13)	8.7 (6.3-12)	8.0 (5.6-11)	7.5 (5.2-11)	7.1 (4.8-10)
6	65	48	35	26	20	16	13	12	11	10	9.8

**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	10	6.9	5.0	3.7	2.9	2.3	2.0	1.8	1.6	1.5	1.4
1	15 (14-17)	10 (9.3-12)	7.4 (6.3-8.7)	5.5 (4.4-6.6)	4.3 (3.2-5.4)	3.4 (2.5-4.5)	2.9 (2.0-3.9)	2.6 (1.8-3.6)	2.4 (1.6-3.4)	2.3 (1.5-3.2)	2.1 (1.4-3.0)
2	22 (18-29)	15 (13-20)	11 (8.4-15)	8.2 (5.8-11)	6.3 (4.2-9.3)	5.1 (3.1-7.8)	4.3 (2.5-6.9)	3.9 (2.2-6.4)	3.6 (1.9-5.9)	3.3 (1.8-5.5)	3.1 (1.6-5.2)
3	31 (24-39)	22 (17-29)	16 (11-23)	12 (7.8-18)	9.2 (5.6-15)	7.3 (4.1-13)	6.2 (3.3-11)	5.6 (2.8-10)	5.1 (2.5-9.5)	4.7 (2.3-8.9)	4.4 (2.1-8.3)
4	43 (32-51)	31 (22-37)	23 (16-29)	17 (12-23)	13 (9.1-19)	10 (6.9-16)	8.8 (5.5-14)	7.9 (4.7-13)	7.3 (4.1-12)	6.7 (3.7-11)	6.3 (3.4-11)
5	56 (49-63)	42 (36-46)	31 (26-36)	23 (19-28)	18 (15-23)	15 (12-19)	12 (9.5-17)	11 (8.1-15)	10 (7.2-14)	9.4 (6.5-13)	8.7 (5.9-12)
6	70	55	42	32	25	20	17	15	14	13	12

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

**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	14	9.7	7.0	5.2	4.0	3.2	2.8	2.5	2.2	2.0	1.9
1	20 (18-23)	14 (13-16)	10 (8.8-12)	7.8 (6.3-9.1)	6.0 (4.6-7.4)	4.7 (3.5-6.1)	4.1 (2.9-5.5)	3.6 (2.5-5.0)	3.3 (2.2-4.5)	3.0 (2.0-4.2)	2.7 (1.8-3.9)
2	29 (24-36)	21 (17-26)	15 (12-19)	11 (8.3-15)	8.7 (6.0-12)	6.9 (4.4-10)	5.9 (3.6-9.1)	5.3 (3.1-8.3)	4.7 (2.7-7.7)	4.3 (2.4-7.1)	4.0 (2.1-6.5)
3	39 (32-47)	29 (23-37)	21 (16-29)	16 (11-24)	12 (8.0-19)	9.8 (5.9-16)	8.5 (4.7-15)	7.5 (4.0-13)	6.8 (3.5-12)	6.2 (3.1-11)	5.7 (2.8-10)
4	52 (41-59)	39 (30-46)	29 (22-37)	22 (16-30)	17 (13-25)	14 (9.8-21)	12 (7.8-18)	11 (6.6-17)	9.5 (5.7-15)	8.7 (5.0-14)	7.9 (4.5-13)
5	65 (58-70)	51 (45-55)	39 (34-45)	30 (26-36)	24 (20-30)	19 (16-25)	16 (13-22)	15 (11-20)	13 (9.4-18)	12 (8.4-17)	11 (7.5-15)
6	77	64	51	40	32	26	22	20	18	16	15

**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	20	14	10	7.7	5.9	4.7	4.0	3.5	3.1	2.7	2.5
1	29 (26-34)	21 (18-25)	15 (13-18)	11 (9.3-13)	8.5 (6.8-9.9)	6.7 (5.2-7.8)	5.6 (4.3-6.5)	4.9 (3.6-5.7)	4.3 (3.1-5.0)	3.8 (2.7-4.5)	3.4 (2.4-4.0)
2	41 (34-51)	30 (24-39)	22 (17-29)	16 (12-22)	12 (8.9-16)	9.6 (6.7-13)	8.0 (5.4-11)	6.8 (4.4-9.1)	5.9 (3.8-8.0)	5.2 (3.3-7.2)	4.6 (2.9-6.5)
3	56 (45-67)	42 (33-53)	32 (23-42)	23 (17-32)	17 (12-25)	14 (8.9-20)	11 (7.1-17)	9.4 (5.8-14)	8.1 (4.9-13)	7.1 (4.3-11)	6.3 (3.7-10)
4	70 (60-77)	57 (46-65)	44 (34-52)	33 (25-41)	25 (18-32)	19 (14-25)	16 (11-21)	13 (9.4-18)	11 (8.0-16)	9.7 (6.9-14)	8.5 (6.0-13)
5	83 (77-85)	72 (64-75)	58 (51-62)	45 (39-50)	35 (29-39)	27 (22-31)	22 (18-26)	18 (15-22)	15 (13-19)	13 (11-17)	11 (9.6-15)
6	89	83	73	60	47	37	30	24	20	18	15

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

**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	26	19	14	11	8.2	6.7	5.6	4.8	4.2	3.6	3.2
1	39 (33-58)	29 (24-45)	22 (18-33)	16 (13-24)	12 (9.5-17)	9.8 (7.5-13)	8.1 (6.1-10)	6.7 (5.0-8.0)	5.7 (4.2-6.6)	4.9 (3.6-5.8)	4.3 (3.2-5.1)
2	54 (42-75)	43 (31-63)	33 (23-50)	25 (17-38)	18 (13-28)	14 (9.8-21)	12 (7.8-17)	9.5 (6.4-13)	7.9 (5.3-10)	6.7 (4.5-9.1)	5.7 (3.8-8.0)
3	69 (53-83)	58 (41-74)	47 (31-62)	36 (23-49)	27 (17-38)	21 (13-30)	17 (10-24)	13 (8.4-19)	11 (6.9-16)	9.1 (5.8-13)	7.7 (5.0-11)
4	81 (65-88)	73 (53-83)	62 (42-73)	51 (32-61)	39 (24-49)	31 (19-39)	24 (15-31)	19 (13-25)	15 (11-20)	13 (9.0-17)	10 (7.8-14)
5	88 (78-91)	84 (69-88)	76 (57-81)	66 (46-72)	54 (36-59)	44 (29-48)	35 (24-39)	27 (20-31)	22 (17-26)	17 (14-21)	14 (12-17)
6	91	89	86	80	70	59	48	38	30	24	20

**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	29	23	18	14	11	9.0	7.6	6.5	5.6	4.8	4.2
1	41 (34-60)	33 (27-49)	26 (20-38)	20 (15-29)	16 (12-22)	13 (9.7-18)	11 (8.0-14)	9.0 (6.6-11)	7.6 (5.6-9.0)	6.5 (4.7-7.4)	5.6 (4.1-6.5)
2	55 (43-72)	45 (34-63)	36 (26-53)	29 (20-43)	23 (16-34)	18 (13-27)	15 (10-22)	12 (8.4-17)	10 (7.0-14)	8.8 (5.9-12)	7.5 (5.0-9.8)
3	67 (53-80)	58 (43-73)	49 (34-64)	40 (27-53)	32 (21-43)	26 (17-35)	21 (14-29)	17 (11-24)	14 (9.2-20)	12 (7.7-16)	10 (6.5-14)
4	77 (63-85)	70 (53-80)	62 (43-73)	53 (35-63)	44 (28-53)	36 (23-44)	30 (19-37)	24 (16-31)	20 (13-25)	16 (11-21)	14 (9.6-18)
5	84 (72-87)	79 (65-84)	73 (56-79)	66 (47-72)	57 (39-63)	48 (33-54)	40 (28-46)	33 (23-38)	27 (20-32)	22 (17-27)	18 (15-22)
6	88	86	82	77	69	62	53	44	37	30	25

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

**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	13	11	9.1	7.8	6.7	5.8	5.0
1	39 (31-55)	32 (25-47)	26 (20-38)	21 (16-31)	18 (13-25)	15 (11-21)	13 (9.1-17)	11 (7.7-14)	9.1 (6.5-11)	7.8 (5.5-9.4)	6.7 (4.7-7.8)
2	50 (39-65)	43 (32-57)	36 (26-49)	29 (21-41)	25 (17-35)	21 (14-29)	17 (12-24)	15 (9.8-20)	12 (8.2-17)	10 (6.9-14)	8.9 (5.9-12)
3	60 (47-72)	53 (40-66)	46 (33-59)	39 (26-51)	33 (22-44)	28 (18-37)	24 (15-32)	20 (13-27)	17 (11-23)	14 (9.1-19)	12 (7.7-16)
4	70 (56-78)	64 (49-73)	57 (41-67)	50 (34-60)	43 (29-53)	37 (25-46)	32 (21-40)	27 (18-34)	23 (15-29)	19 (13-25)	16 (11-21)
5	77 (64-82)	73 (58-78)	67 (51-73)	61 (44-67)	54 (38-61)	48 (33-55)	42 (29-49)	36 (25-42)	31 (21-36)	26 (18-31)	22 (16-27)
6	82	80	76	71	65	59	53	46	40	34	29

**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	24	19	16	13	11	9.4	8.1	6.9	5.9	5.1	4.4
1	32 (24-46)	27 (20-39)	22 (16-32)	18 (13-27)	15 (11-23)	13 (9.4-19)	11 (7.9-16)	9.6 (6.7-13)	8.2 (5.7-11)	6.9 (4.8-9.2)	5.9 (4.1-7.7)
2	41 (31-55)	35 (25-48)	30 (21-42)	25 (17-36)	21 (14-31)	18 (12-26)	16 (10-22)	13 (8.7-19)	11 (7.3-16)	9.6 (6.2-13)	8.1 (5.2-11)
3	51 (38-64)	45 (32-58)	39 (27-51)	34 (22-45)	29 (19-39)	25 (16-34)	22 (14-29)	18 (11-25)	16 (9.7-21)	13 (8.2-18)	11 (6.9-15)
4	61 (47-70)	55 (41-65)	49 (34-59)	43 (29-53)	38 (25-48)	34 (22-42)	29 (19-37)	25 (16-32)	21 (14-28)	18 (12-24)	15 (9.8-20)
5	69 (55-75)	65 (49-71)	60 (43-66)	54 (37-61)	49 (33-56)	44 (29-51)	38 (25-45)	34 (22-40)	29 (19-35)	25 (16-30)	21 (14-26)
6	75	73	69	64	59	54	49	44	38	33	28