

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 body mass index (BMI kg/m²), 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.

Age = 50 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.3	1.2	1.1	1.0	0.8	0.7	0.6
1	2.1 (1.5-3.2)	1.9 (1.3-2.7)	1.7 (1.2-2.4)	1.5 (1.0-2.1)	1.3 (0.9-1.8)	1.2 (0.8-1.6)	1.0 (0.7-1.4)
2	3.5 (1.9-5.7)	3.0 (1.6-5.0)	2.7 (1.4-4.7)	2.4 (1.2-4.1)	2.1 (1.1-3.6)	1.8 (0.9-3.1)	1.6 (0.8-2.7)
3	5.7 (2.8-9.8)	4.7 (2.3-8.4)	4.2 (2.0-7.7)	3.6 (1.7-6.7)	3.2 (1.5-5.9)	2.7 (1.3-5.1)	2.4 (1.1-4.5)
4	9.0 (4.8-14)	7.3 (4.0-12)	6.4 (3.4-11)	5.5 (2.9-9.2)	4.8 (2.5-8.0)	4.2 (2.2-7.0)	3.6 (1.9-6.1)
5	14 (8.5-18)	11 (7.1-15)	9.6 (6.3-13)	8.3 (5.5-11)	7.2 (4.8-9.7)	6.2 (4.2-8.4)	5.4 (3.6-7.3)
6	22	17	14	12	11	9.2	7.9

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.9	1.6	1.5	1.3	1.1	1.0	0.9
1	3.1 (2.2-4.5)	2.6 (1.8-3.6)	2.3 (1.6-3.2)	2.0 (1.4-2.8)	1.8 (1.2-2.4)	1.5 (1.0-2.1)	1.3 (0.9-1.8)
2	5.0 (2.8-8.0)	4.1 (2.3-6.6)	3.6 (2.0-6.1)	3.2 (1.7-5.3)	2.7 (1.5-4.6)	2.4 (1.3-4.0)	2.1 (1.1-3.5)
3	8.0 (4.3-13)	6.5 (3.3-11)	5.6 (2.8-10)	4.8 (2.4-8.7)	4.2 (2.0-7.6)	3.6 (1.8-6.6)	3.1 (1.5-5.8)
4	13 (7.1-19)	10 (5.9-16)	8.5 (4.8-14)	7.3 (4.1-12)	6.3 (3.5-10)	5.5 (3.0-9.0)	4.7 (2.6-7.9)
5	20 (13-25)	15 (10-20)	13 (8.7-17)	11 (7.5-15)	9.5 (6.5-13)	8.2 (5.6-11)	7.1 (4.9-9.5)
6	30	23	19	16	14	12	10

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.9	2.5	2.2	1.9	1.6	1.4	1.2
1	4.8 (3.5-6.7)	3.9 (2.8-5.4)	3.4 (2.4-4.6)	3.0 (2.1-4.0)	2.6 (1.8-3.4)	2.2 (1.5-2.9)	1.9 (1.3-2.6)
2	7.8 (4.7-12)	6.2 (3.6-9.5)	5.3 (3.0-8.6)	4.6 (2.6-7.5)	4.0 (2.2-6.5)	3.4 (1.9-5.7)	3.0 (1.6-4.9)
3	12 (7.3-19)	9.7 (5.4-16)	8.2 (4.3-14)	7.0 (3.7-12)	6.1 (3.1-11)	5.2 (2.7-9.2)	4.5 (2.3-8.1)
4	19 (11-28)	15 (9.1-22)	12 (7.5-19)	11 (6.4-17)	9.1 (5.4-15)	7.9 (4.6-13)	6.8 (3.9-11)
5	29 (20-35)	22 (16-28)	18 (13-24)	16 (11-20)	14 (9.6-18)	12 (8.3-15)	10 (7.1-13)
6	43	33	27	23	20	17	15

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.0	4.0	3.5	3.0	2.6	2.2	1.9
1	8.1 (6.2-11)	6.4 (4.7-8.3)	5.4 (3.9-7.0)	4.6 (3.3-6.0)	4.0 (2.8-5.1)	3.4 (2.4-4.4)	2.9 (2.1-3.8)
2	13 (8.5-19)	10 (6.2-14)	8.3 (4.9-13)	7.1 (4.2-11)	6.1 (3.6-9.5)	5.2 (3.0-8.3)	4.5 (2.6-7.2)
3	20 (13-29)	15 (9.5-23)	13 (7.2-20)	11 (6.1-18)	9.3 (5.1-15)	7.9 (4.3-13)	6.8 (3.7-12)
4	30 (20-40)	23 (15-33)	19 (12-28)	16 (11-24)	14 (8.9-21)	12 (7.5-18)	10 (6.3-16)
5	43 (33-51)	34 (25-41)	27 (21-34)	24 (18-30)	20 (15-26)	17 (13-22)	15 (11-19)
6	59	47	39	34	29	25	22

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.2	7.0	5.8	4.9	4.2	3.6	3.1
1	15 (11-18)	11 (8.4-14)	8.8 (6.6-11)	7.4 (5.6-9.4)	6.3 (4.7-8.0)	5.4 (4.0-6.8)	4.6 (3.4-5.9)
2	23 (16-31)	17 (11-23)	13 (8.6-18)	11 (7.2-16)	9.5 (6.1-13)	8.1 (5.1-11)	6.8 (4.3-9.7)
3	36 (25-49)	27 (18-38)	20 (13-30)	17 (11-26)	14 (9.0-22)	12 (7.5-18)	10 (6.3-16)
4	51 (40-65)	40 (30-53)	30 (22-42)	26 (19-36)	22 (16-31)	18 (13-26)	15 (11-22)
5	68 (62-76)	56 (49-65)	44 (38-52)	38 (32-45)	32 (27-39)	27 (22-34)	23 (19-29)
6	81	73	61	53	46	40	34

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	15	12	9.5	8.0	6.8	5.7	4.9
1	25 (19-36)	19 (14-26)	15 (11-18)	12 (9.2-15)	10 (7.7-12)	8.6 (6.4-10)	7.3 (5.4-8.8)
2	39 (26-54)	30 (19-42)	23 (15-31)	19 (12-26)	16 (10-21)	13 (8.4-18)	11 (7.0-15)
3	55 (38-70)	44 (29-60)	34 (22-49)	29 (18-42)	24 (15-35)	20 (13-30)	17 (10-25)
4	70 (54-81)	61 (45-75)	50 (36-65)	43 (30-57)	36 (25-50)	31 (21-43)	26 (17-36)
5	80 (70-86)	76 (63-83)	67 (54-76)	60 (47-69)	52 (40-62)	45 (34-54)	38 (29-46)
6	87	86	82	76	69	62	54

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	20	17	14	12	10	8.5	7.2
1	31 (23-44)	26 (19-36)	21 (16-27)	18 (13-23)	15 (11-19)	13 (9.3-15)	10 (7.7-13)
2	44 (31-60)	37 (26-51)	31 (21-42)	26 (18-36)	22 (15-30)	18 (12-25)	15 (10-20)
3	57 (43-71)	51 (37-65)	44 (31-57)	38 (26-50)	32 (22-43)	27 (18-36)	22 (15-31)
4	69 (55-79)	65 (50-76)	58 (45-71)	51 (38-64)	45 (32-57)	38 (27-50)	32 (23-43)
5	78 (67-83)	76 (64-82)	72 (59-79)	65 (53-74)	59 (46-67)	52 (40-60)	45 (34-53)
6	84	83	82	77	72	65	58

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	21	20	18	15	13	11	9.1
1	31 (23-44)	28 (21-39)	26 (20-34)	22 (16-28)	18 (13-23)	15 (11-19)	13 (9.2-16)
2	42 (31-58)	39 (28-53)	36 (25-47)	31 (21-40)	26 (17-34)	22 (14-29)	18 (12-24)
3	54 (39-68)	51 (37-65)	48 (34-61)	42 (29-54)	36 (24-47)	30 (20-41)	25 (16-34)
4	65 (51-75)	63 (48-73)	60 (46-71)	53 (40-65)	47 (34-58)	41 (29-52)	35 (24-45)
5	74 (63-79)	72 (61-79)	70 (59-77)	65 (53-73)	59 (46-67)	52 (40-61)	45 (35-54)
6	79	79	79	74	69	63	57

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	19	18	18	15	12	10	8.4
1	28 (21-41)	26 (19-37)	25 (18-33)	21 (15-27)	17 (12-22)	14 (10-18)	12 (8.3-15)
2	39 (27-54)	36 (25-50)	34 (24-45)	29 (20-39)	24 (16-33)	20 (13-27)	17 (11-23)
3	50 (35-64)	47 (33-61)	45 (31-58)	39 (26-52)	33 (22-45)	28 (18-38)	23 (15-33)
4	60 (46-71)	58 (44-69)	56 (43-67)	50 (37-61)	44 (31-55)	37 (26-48)	32 (21-42)
5	68 (58-73)	68 (56-74)	66 (55-74)	61 (49-69)	55 (43-63)	48 (37-57)	42 (31-51)
6	71	74	74	70	65	59	53