

Australia - 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 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	1.0	0.9	0.9	0.8	0.7	0.6	0.5
1	1.6 (1.1-2.4)	1.5 (1.0-2.1)	1.4 (0.9-1.9)	1.2 (0.8-1.7)	1.1 (0.7-1.5)	0.9 (0.6-1.3)	0.8 (0.5-1.1)
2	2.5 (1.4-4.3)	2.3 (1.2-3.9)	2.2 (1.1-3.8)	1.9 (1.0-3.3)	1.6 (0.9-2.9)	1.4 (0.7-2.5)	1.2 (0.6-2.2)
3	4.0 (2.0-7.1)	3.6 (1.7-6.5)	3.3 (1.6-6.1)	2.9 (1.3-5.3)	2.5 (1.2-4.7)	2.2 (1.0-4.1)	1.9 (0.9-3.6)
4	6.4 (3.4-10)	5.5 (2.9-9.0)	5.0 (2.6-8.3)	4.3 (2.2-7.2)	3.7 (1.9-6.3)	3.3 (1.7-5.5)	2.8 (1.4-4.8)
5	9.9 (5.9-13)	8.3 (5.3-11)	7.4 (4.9-10)	6.4 (4.3-8.8)	5.6 (3.7-7.6)	4.8 (3.2-6.6)	4.2 (2.8-5.8)
6	15	12	11	9.5	8.2	7.1	6.1

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

Age = 55 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 (1.4-3.0)	1.8 (1.3-2.6)	1.7 (1.2-2.3)	1.5 (1.0-2.0)	1.3 (0.9-1.7)	1.1 (0.8-1.5)	1.0 (0.7-1.3)
2	3.3 (1.9-5.3)	2.9 (1.6-4.8)	2.6 (1.4-4.5)	2.3 (1.2-3.9)	2.0 (1.1-3.4)	1.7 (0.9-3.0)	1.5 (0.8-2.6)
3	5.2 (2.8-8.7)	4.5 (2.3-7.8)	4.0 (2.0-7.3)	3.5 (1.7-6.3)	3.0 (1.5-5.5)	2.6 (1.3-4.8)	2.3 (1.1-4.2)
4	8.2 (4.7-13)	6.9 (3.9-11)	6.1 (3.3-10)	5.3 (2.8-8.6)	4.5 (2.4-7.5)	3.9 (2.1-6.5)	3.4 (1.8-5.6)
5	13 (7.9-16)	10 (6.8-14)	9.1 (6.1-12)	7.8 (5.3-11)	6.7 (4.6-9.1)	5.8 (3.9-7.9)	5.0 (3.4-6.8)
6	19	16	13	11	9.9	8.5	7.3

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.8	1.6	1.5	1.3	1.1	0.9	0.8
1	2.9 (2.1-4.1)	2.5 (1.8-3.5)	2.3 (1.6-3.1)	2.0 (1.3-2.6)	1.7 (1.2-2.3)	1.5 (1.0-2.0)	1.3 (0.9-1.7)
2	4.6 (2.8-7.0)	3.9 (2.3-6.2)	3.5 (2.0-5.8)	3.0 (1.7-5.0)	2.6 (1.4-4.3)	2.2 (1.2-3.8)	1.9 (1.1-3.3)
3	7.3 (4.3-11)	6.1 (3.4-10)	5.4 (2.8-9.3)	4.6 (2.4-8.0)	3.9 (2.0-6.9)	3.4 (1.7-6.0)	2.9 (1.5-5.2)
4	11 (6.8-17)	9.3 (5.7-14)	8.1 (4.8-13)	6.9 (4.0-11)	5.9 (3.4-9.5)	5.1 (2.9-8.2)	4.3 (2.4-7.1)
5	17 (11-22)	14 (9.5-18)	12 (8.3-16)	10 (7.1-14)	8.7 (6.1-12)	7.5 (5.2-10)	6.4 (4.5-8.7)
6	25	21	18	15	13	11	9.3

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.8	2.3	2.1	1.8	1.5	1.3	1.1
1	4.4 (3.2-6.0)	3.7 (2.7-4.9)	3.3 (2.3-4.3)	2.8 (1.9-3.6)	2.4 (1.6-3.1)	2.0 (1.4-2.6)	1.7 (1.2-2.3)
2	6.9 (4.4-9.9)	5.7 (3.5-8.5)	5.0 (2.9-7.8)	4.2 (2.5-6.7)	3.6 (2.1-5.8)	3.1 (1.8-5.0)	2.6 (1.5-4.3)
3	11 (6.9-15)	8.8 (5.4-13)	7.6 (4.3-12)	6.4 (3.6-11)	5.4 (3.0-9.1)	4.6 (2.5-7.8)	3.9 (2.1-6.7)
4	16 (11-22)	13 (8.6-19)	11 (7.3-17)	9.6 (6.1-15)	8.1 (5.0-13)	6.9 (4.2-11)	5.8 (3.5-9.3)
5	23 (17-29)	19 (14-25)	17 (12-21)	14 (10-18)	12 (8.6-16)	10 (7.3-13)	8.5 (6.1-11)
6	33	28	24	20	17	15	12

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.5	3.7	3.2	2.7	2.3	1.9	1.6
1	7.1 (5.2-8.9)	5.8 (4.3-7.3)	4.9 (3.6-6.2)	4.1 (3.0-5.2)	3.4 (2.5-4.4)	2.9 (2.1-3.7)	2.4 (1.7-3.1)
2	11 (7.4-16)	9.1 (5.8-13)	7.4 (4.7-10)	6.2 (3.9-8.7)	5.1 (3.2-7.3)	4.3 (2.7-6.1)	3.6 (2.2-5.1)
3	17 (11-25)	14 (9.2-20)	11 (7.2-17)	9.4 (5.9-14)	7.8 (4.8-12)	6.4 (4.0-9.8)	5.3 (3.3-8.2)
4	26 (18-36)	21 (15-30)	17 (12-25)	14 (9.7-21)	12 (7.9-17)	9.7 (6.5-14)	8.0 (5.3-12)
5	37 (31-45)	32 (26-39)	26 (21-32)	21 (17-27)	18 (14-23)	15 (11-19)	12 (9.4-16)
6	49	44	37	31	26	22	18

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.8	5.7	4.8	4.0	3.3	2.8	2.3
1	11 (7.8-18)	9.3 (6.5-14)	7.6 (5.5-10)	6.2 (4.5-8.1)	5.1 (3.7-6.5)	4.2 (3.0-5.3)	3.5 (2.5-4.2)
2	18 (11-29)	15 (9.1-23)	12 (7.4-18)	9.8 (6.0-14)	8.0 (4.9-12)	6.5 (4.0-9.4)	5.3 (3.2-7.6)
3	28 (16-41)	23 (14-34)	19 (11-28)	15 (9.3-23)	12 (7.5-19)	10 (6.1-15)	8.2 (4.9-12)
4	39 (24-52)	35 (21-47)	29 (18-40)	24 (15-34)	19 (12-28)	16 (9.5-23)	13 (7.6-19)
5	52 (37-61)	48 (34-57)	42 (29-51)	35 (24-44)	29 (20-37)	24 (16-31)	19 (13-25)
6	63	61	56	49	42	35	29

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.6	7.6	6.7	5.5	4.5	3.7	3.0
1	14 (9.6-22)	12 (8.5-18)	10 (7.4-15)	8.4 (6.0-12)	6.9 (4.8-9.4)	5.6 (3.9-7.5)	4.5 (3.2-6.0)
2	21 (14-33)	19 (12-28)	16 (10-23)	13 (8.1-18)	10 (6.5-15)	8.4 (5.3-12)	6.8 (4.2-9.6)
3	31 (19-44)	27 (17-39)	24 (15-33)	19 (12-28)	16 (9.6-22)	13 (7.7-18)	10 (6.1-15)
4	42 (27-54)	38 (24-50)	34 (23-45)	28 (18-38)	23 (15-32)	19 (12-27)	15 (9.5-22)
5	54 (38-63)	50 (35-59)	46 (33-55)	40 (27-48)	33 (22-41)	27 (18-35)	22 (15-29)
6	65	62	59	52	45	38	32

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.5	8.8	8.4	6.8	5.5	4.5	3.6
1	15 (10-24)	14 (9.5-21)	13 (8.9-18)	10 (7.1-15)	8.3 (5.7-12)	6.7 (4.5-9.3)	5.4 (3.6-7.4)
2	23 (14-35)	21 (13-32)	19 (12-28)	15 (9.6-23)	12 (7.7-18)	9.9 (6.1-15)	7.9 (4.9-12)
3	32 (20-46)	30 (18-42)	27 (17-38)	22 (13-32)	18 (11-27)	15 (8.4-22)	12 (6.7-18)
4	43 (28-56)	40 (26-52)	37 (24-48)	31 (20-42)	26 (16-35)	21 (13-29)	17 (10-24)
5	55 (40-63)	52 (37-61)	49 (35-58)	42 (29-51)	36 (24-44)	30 (20-38)	24 (16-31)
6	65	63	60	54	47	40	34

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	10	9.2	8.6	7.0	5.6	4.5	3.7
1	16 (11-25)	14 (9.9-22)	13 (9.2-19)	11 (7.3-16)	8.5 (5.8-12)	6.8 (4.6-9.8)	5.5 (3.7-7.7)
2	24 (15-37)	22 (14-33)	20 (13-29)	16 (10-24)	13 (7.9-19)	10 (6.3-15)	8.2 (5.0-12)
3	34 (21-47)	31 (19-44)	28 (17-40)	23 (14-34)	19 (11-28)	15 (8.7-23)	12 (6.9-18)
4	44 (29-57)	42 (27-54)	39 (25-50)	33 (21-43)	27 (17-36)	22 (14-30)	18 (11-25)
5	55 (41-62)	53 (38-61)	50 (36-59)	43 (30-52)	37 (25-46)	31 (20-39)	25 (16-33)
6	62	63	61	55	48	42	35