

Hong Kong - 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 Hong Kong. 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	0.9	0.9	0.9	0.7	0.7	0.6	0.5
1	1.5 (1.0-2.3)	1.4 (0.9-2.0)	1.3 (0.9-1.9)	1.2 (0.8-1.6)	1.0 (0.7-1.4)	0.9 (0.6-1.2)	0.8 (0.5-1.1)
2	2.4 (1.3-4.1)	2.2 (1.2-3.8)	2.1 (1.1-3.6)	1.8 (0.9-3.2)	1.6 (0.8-2.8)	1.4 (0.7-2.4)	1.2 (0.6-2.1)
3	3.9 (1.9-6.7)	3.4 (1.6-6.1)	3.2 (1.5-5.9)	2.7 (1.3-5.1)	2.4 (1.1-4.4)	2.1 (1.0-3.9)	1.8 (0.8-3.4)
4	6.0 (3.3-9.6)	5.2 (2.8-8.5)	4.8 (2.5-8.0)	4.1 (2.1-6.9)	3.6 (1.8-6.0)	3.1 (1.6-5.2)	2.7 (1.4-4.6)
5	9.4 (5.5-12)	7.9 (5.0-11)	7.1 (4.7-9.7)	6.1 (4.1-8.4)	5.3 (3.5-7.3)	4.6 (3.1-6.3)	4.0 (2.7-5.5)
6	14	12	10	9.0	7.8	6.7	5.8

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.7	1.5	1.5	1.3	1.1	1.0	0.8
1	2.7 (1.9-4.0)	2.4 (1.7-3.4)	2.3 (1.6-3.1)	2.0 (1.3-2.7)	1.7 (1.2-2.3)	1.5 (1.0-2.0)	1.3 (0.9-1.8)
2	4.3 (2.4-6.9)	3.8 (2.1-6.3)	3.5 (1.9-6.0)	3.1 (1.6-5.2)	2.6 (1.4-4.6)	2.3 (1.2-4.0)	2.0 (1.1-3.5)
3	6.8 (3.6-11)	5.9 (3.0-10)	5.4 (2.7-9.6)	4.6 (2.3-8.4)	4.0 (2.0-7.3)	3.5 (1.7-6.3)	3.0 (1.5-5.5)
4	11 (6.1-16)	9.0 (5.1-14)	8.1 (4.4-13)	6.9 (3.8-11)	6.0 (3.2-9.9)	5.2 (2.7-8.6)	4.5 (2.4-7.4)
5	16 (10-21)	13 (8.8-18)	12 (8.1-16)	10 (7.0-14)	8.8 (6.0-12)	7.6 (5.2-10)	6.6 (4.5-9.0)
6	24	20	17	15	13	11	9.5

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.7	2.4	2.3	2.0	1.7	1.5	1.3
1	4.4 (3.1-6.2)	3.8 (2.7-5.3)	3.5 (2.4-4.7)	3.0 (2.1-4.1)	2.6 (1.8-3.5)	2.3 (1.5-3.0)	2.0 (1.3-2.6)
2	6.9 (4.1-10)	5.9 (3.4-9.4)	5.4 (3.0-8.9)	4.7 (2.6-7.7)	4.0 (2.2-6.7)	3.4 (1.9-5.8)	3.0 (1.6-5.1)
3	11 (6.3-16)	9.1 (5.1-15)	8.2 (4.3-14)	7.0 (3.7-12)	6.0 (3.1-11)	5.2 (2.7-9.1)	4.5 (2.3-7.9)
4	16 (10-23)	14 (8.5-21)	12 (7.2-19)	10 (6.1-17)	8.9 (5.1-14)	7.7 (4.3-12)	6.6 (3.7-11)
5	24 (16-30)	20 (14-26)	18 (12-23)	15 (11-20)	13 (9.1-17)	11 (7.8-15)	9.6 (6.7-13)
6	34	29	25	22	19	16	14

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.3	3.8	3.5	3.0	2.5	2.2	1.9
1	6.7 (4.9-9.1)	5.9 (4.2-7.8)	5.3 (3.7-6.9)	4.5 (3.2-5.9)	3.9 (2.7-5.1)	3.3 (2.3-4.3)	2.9 (2.0-3.7)
2	10 (6.7-15)	8.9 (5.5-13)	8.1 (4.7-13)	6.9 (4.0-11)	5.9 (3.4-9.4)	5.0 (2.9-8.2)	4.3 (2.4-7.1)
3	16 (10-22)	13 (8.3-20)	12 (6.9-19)	10 (5.8-17)	8.7 (4.9-14)	7.5 (4.1-13)	6.4 (3.5-11)
4	23 (16-31)	20 (13-28)	18 (11-26)	15 (9.5-23)	13 (7.9-20)	11 (6.6-17)	9.3 (5.5-15)
5	32 (23-39)	28 (21-35)	25 (19-32)	21 (16-28)	18 (13-24)	16 (11-21)	13 (9.7-18)
6	43	39	35	30	26	22	19

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.5	5.6	4.9	4.2	3.5	3.0	2.5
1	10 (7.4-13)	8.5 (6.3-11)	7.4 (5.4-9.4)	6.2 (4.5-8.0)	5.2 (3.8-6.7)	4.4 (3.2-5.7)	3.7 (2.7-4.8)
2	16 (10-22)	13 (8.5-18)	11 (7.1-16)	9.3 (5.9-13)	7.7 (4.9-11)	6.5 (4.1-9.3)	5.4 (3.4-7.8)
3	23 (15-33)	20 (13-28)	17 (11-24)	14 (8.8-20)	11 (7.2-17)	9.6 (6.0-14)	8.0 (5.0-12)
4	34 (24-45)	29 (20-40)	24 (17-34)	20 (14-29)	17 (12-25)	14 (9.5-21)	12 (7.8-17)
5	45 (39-54)	41 (34-49)	35 (29-43)	29 (24-37)	25 (20-31)	21 (16-27)	17 (13-22)
6	57	54	48	41	35	30	25

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.8	7.4	6.4	5.3	4.4	3.6	3.0
1	14 (10-22)	12 (8.5-17)	9.9 (7.2-13)	8.1 (5.9-11)	6.7 (4.8-8.5)	5.5 (3.9-6.9)	4.5 (3.2-5.6)
2	23 (14-35)	19 (12-28)	15 (9.6-22)	13 (7.8-18)	10 (6.4-15)	8.4 (5.2-12)	6.9 (4.3-9.9)
3	34 (20-49)	29 (17-42)	24 (15-34)	20 (12-28)	16 (9.8-23)	13 (7.9-19)	11 (6.4-16)
4	46 (30-59)	41 (27-55)	35 (23-48)	29 (19-41)	24 (15-34)	20 (12-29)	16 (9.9-24)
5	59 (44-68)	55 (40-64)	49 (36-59)	42 (30-52)	36 (25-44)	30 (21-37)	24 (17-31)
6	71	68	63	56	49	42	35

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	9.4	8.5	6.9	5.7	4.6	3.8
1	17 (12-27)	15 (10-23)	13 (9.3-18)	11 (7.5-15)	8.6 (6.0-12)	7.0 (4.9-9.5)	5.7 (3.9-7.6)
2	25 (17-39)	22 (14-34)	20 (13-28)	16 (10-23)	13 (8.2-18)	10 (6.6-15)	8.5 (5.3-12)
3	36 (23-50)	32 (20-45)	29 (18-39)	24 (15-33)	19 (12-27)	16 (9.4-22)	13 (7.5-18)
4	48 (32-60)	44 (29-56)	40 (27-51)	34 (22-44)	28 (18-38)	23 (14-32)	19 (12-26)
5	60 (44-68)	56 (41-65)	52 (38-61)	45 (32-54)	39 (27-47)	32 (22-40)	27 (18-34)
6	70	67	64	58	51	44	37

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	12	11	9.7	7.9	6.4	5.2	4.3
1	19 (14-30)	17 (12-26)	15 (11-21)	12 (8.5-17)	9.7 (6.8-14)	7.9 (5.5-11)	6.4 (4.4-8.7)
2	29 (19-43)	25 (16-38)	22 (14-32)	18 (12-26)	15 (9.2-21)	12 (7.4-17)	9.6 (6.0-14)
3	40 (27-55)	36 (23-50)	32 (21-44)	26 (17-37)	22 (13-31)	18 (11-25)	14 (8.5-21)
4	52 (36-64)	48 (33-60)	44 (30-56)	37 (25-49)	31 (20-42)	26 (16-35)	21 (13-29)
5	63 (49-70)	60 (45-68)	56 (42-65)	50 (35-59)	43 (30-52)	36 (24-45)	30 (20-38)
6	70	70	68	62	55	48	41

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.0	7.9	7.3	5.9	4.7	3.8	3.1
1	14 (10-23)	13 (8.8-20)	11 (7.9-17)	9.1 (6.3-13)	7.3 (5.0-10)	5.8 (4.0-8.3)	4.7 (3.2-6.5)
2	22 (14-35)	19 (12-30)	17 (11-26)	14 (8.6-21)	11 (6.8-17)	8.9 (5.4-13)	7.1 (4.3-10)
3	32 (20-45)	29 (17-41)	25 (15-36)	21 (12-30)	17 (9.8-24)	13 (7.7-20)	11 (6.1-16)
4	43 (28-55)	39 (25-51)	36 (23-47)	30 (19-40)	24 (15-33)	20 (12-28)	16 (9.6-23)
5	54 (39-62)	51 (36-60)	47 (33-56)	41 (28-50)	34 (23-43)	28 (18-36)	23 (15-30)
6	62	62	59	53	46	39	33