

The US (Black) - 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 the US (Black). 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	1.2	1.2	1.2	1.1	1.0	0.8	0.7
1	1.9 (1.2-2.7)	1.9 (1.2-2.7)	1.9 (1.3-2.6)	1.7 (1.1-2.3)	1.5 (1.0-2.0)	1.3 (0.8-1.7)	1.1 (0.7-1.5)
2	2.9 (1.5-5.1)	2.9 (1.5-5.2)	2.9 (1.5-5.2)	2.5 (1.3-4.6)	2.2 (1.1-4.0)	1.9 (1.0-3.5)	1.7 (0.9-3.1)
3	4.4 (2.2-7.8)	4.4 (2.1-7.9)	4.4 (2.1-8.1)	3.8 (1.8-7.1)	3.3 (1.6-6.2)	2.9 (1.4-5.4)	2.5 (1.2-4.7)
4	6.6 (3.3-11)	6.5 (3.3-11)	6.5 (3.3-11)	5.6 (2.8-9.5)	4.9 (2.4-8.3)	4.2 (2.1-7.2)	3.7 (1.8-6.3)
5	9.7 (5.9-13)	9.5 (6.1-13)	9.4 (6.3-13)	8.1 (5.5-11)	7.0 (4.7-9.9)	6.1 (4.1-8.6)	5.3 (3.6-7.5)
6	14	14	13	12	10	8.7	7.6

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.6	1.7	1.7	1.5	1.3	1.2	1.0
1	2.5 (1.7-3.6)	2.6 (1.7-3.6)	2.7 (1.8-3.6)	2.3 (1.5-3.1)	2.0 (1.3-2.7)	1.8 (1.2-2.4)	1.5 (1.0-2.1)
2	3.8 (2.1-6.7)	3.9 (2.1-6.9)	4.0 (2.1-7.1)	3.5 (1.8-6.2)	3.0 (1.6-5.4)	2.6 (1.4-4.7)	2.3 (1.2-4.1)
3	5.7 (3.0-9.7)	5.8 (2.9-10)	5.9 (2.9-11)	5.2 (2.5-9.4)	4.5 (2.2-8.1)	3.9 (1.9-7.1)	3.4 (1.6-6.2)
4	8.4 (4.5-13)	8.5 (4.5-14)	8.6 (4.5-14)	7.5 (3.9-12)	6.5 (3.3-11)	5.6 (2.8-9.5)	4.9 (2.4-8.3)
5	12 (7.7-17)	12 (8.1-17)	12 (8.5-17)	11 (7.4-15)	9.3 (6.4-13)	8.0 (5.5-11)	7.0 (4.8-9.8)
6	17	17	17	15	13	11	9.8

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.0	2.1	2.1	1.8	1.6	1.4	1.2
1	3.1 (2.1-4.3)	3.1 (2.1-4.3)	3.2 (2.1-4.3)	2.8 (1.9-3.7)	2.4 (1.6-3.2)	2.1 (1.4-2.8)	1.8 (1.2-2.4)
2	4.7 (2.6-7.8)	4.7 (2.6-8.0)	4.8 (2.6-8.3)	4.2 (2.2-7.2)	3.6 (1.9-6.3)	3.1 (1.7-5.5)	2.7 (1.4-4.8)
3	6.9 (3.9-11)	7.0 (3.7-12)	7.1 (3.6-12)	6.1 (3.1-11)	5.3 (2.7-9.4)	4.6 (2.3-8.2)	3.9 (2.0-7.1)
4	10 (5.7-16)	10 (5.6-16)	10 (5.6-17)	8.8 (4.7-14)	7.6 (4.0-13)	6.6 (3.4-11)	5.7 (2.9-9.5)
5	14 (9.5-20)	14 (9.9-20)	15 (10-20)	13 (8.8-17)	11 (7.6-15)	9.3 (6.5-13)	8.0 (5.6-11)
6	20	20	20	17	15	13	11

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.3	2.3	2.3	2.0	1.7	1.5	1.3
1	3.4 (2.3-4.7)	3.4 (2.3-4.6)	3.5 (2.4-4.6)	3.0 (2.0-3.9)	2.6 (1.7-3.4)	2.2 (1.5-2.9)	1.9 (1.3-2.5)
2	5.1 (3.1-8.1)	5.1 (3.0-8.4)	5.2 (2.9-8.7)	4.4 (2.5-7.5)	3.8 (2.1-6.5)	3.3 (1.8-5.6)	2.8 (1.5-4.9)
3	7.5 (4.4-12)	7.5 (4.4-12)	7.6 (4.1-13)	6.5 (3.5-11)	5.5 (3.0-9.5)	4.7 (2.5-8.2)	4.1 (2.1-7.1)
4	11 (6.8-16)	11 (6.5-17)	11 (6.3-17)	9.3 (5.3-15)	7.9 (4.4-13)	6.8 (3.7-11)	5.8 (3.1-9.5)
5	15 (11-20)	15 (11-21)	15 (11-21)	13 (9.4-18)	11 (8.0-15)	9.6 (6.8-13)	8.2 (5.8-11)
6	21	21	21	18	15	13	11

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.7	2.7	2.6	2.2	1.9	1.6	1.4
1	4.1 (2.9-5.4)	3.9 (2.8-5.2)	3.8 (2.7-5.1)	3.2 (2.3-4.3)	2.7 (1.9-3.6)	2.3 (1.6-3.1)	2.0 (1.4-2.6)
2	6.2 (3.9-9.4)	5.9 (3.7-8.7)	5.6 (3.5-8.1)	4.7 (2.9-6.9)	3.9 (2.4-5.8)	3.3 (2.0-4.9)	2.8 (1.7-4.2)
3	9.3 (5.5-14)	8.7 (5.4-13)	8.1 (5.1-12)	6.8 (4.2-10)	5.7 (3.5-8.7)	4.8 (2.9-7.3)	4.0 (2.4-6.1)
4	14 (8.6-20)	13 (8.2-19)	12 (7.7-18)	9.8 (6.3-15)	8.2 (5.2-12)	6.8 (4.3-10)	5.7 (3.6-8.7)
5	20 (15-26)	18 (14-24)	17 (13-22)	14 (11-19)	12 (8.9-16)	9.7 (7.3-13)	8.0 (6.0-11)
6	27	26	24	20	17	14	11

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.5	3.3	3.2	2.6	2.2	1.9	1.6
1	5.7 (3.8-8.7)	5.2 (3.6-7.2)	4.7 (3.4-5.9)	3.9 (2.8-4.8)	3.2 (2.3-4.0)	2.7 (1.9-3.4)	2.2 (1.6-2.8)
2	9.1 (5.2-15)	8.1 (4.9-13)	7.2 (4.4-10)	5.9 (3.6-8.5)	4.8 (3.0-6.9)	3.9 (2.4-5.6)	3.2 (2.0-4.6)
3	14 (7.3-23)	13 (7.0-20)	11 (6.6-16)	8.9 (5.4-13)	7.2 (4.3-11)	5.9 (3.5-8.6)	4.8 (2.9-7.0)
4	21 (12-31)	19 (11-28)	17 (10-24)	14 (8.1-20)	11 (6.6-16)	8.8 (5.3-13)	7.1 (4.3-11)
5	30 (19-38)	28 (18-36)	25 (17-32)	20 (14-26)	16 (12-22)	13 (9.4-18)	11 (7.6-14)
6	40	38	35	29	24	20	16

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.0	4.6	4.3	3.5	2.9	2.4	2.0
1	8.0 (5.4-13)	7.2 (5.0-11)	6.5 (4.6-8.8)	5.3 (3.8-7.0)	4.3 (3.1-5.6)	3.5 (2.5-4.5)	2.9 (2.0-3.6)
2	12 (7.4-20)	11 (6.9-17)	9.9 (6.2-14)	8.0 (5.0-11)	6.5 (4.1-9.0)	5.2 (3.3-7.3)	4.3 (2.7-5.9)
3	19 (10-29)	17 (9.8-25)	15 (9.1-21)	12 (7.3-17)	9.7 (5.9-14)	7.8 (4.7-11)	6.3 (3.8-9.1)
4	27 (16-37)	25 (15-34)	22 (14-30)	18 (11-25)	14 (9.0-21)	12 (7.2-17)	9.3 (5.7-13)
5	37 (24-45)	34 (22-43)	31 (21-39)	26 (17-33)	21 (14-27)	17 (11-22)	14 (9.3-18)
6	47	45	42	36	30	24	20

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.3	5.6	5.1	4.1	3.4	2.8	2.3
1	10 (7.0-17)	9.0 (6.2-14)	7.8 (5.5-11)	6.3 (4.5-8.7)	5.1 (3.6-6.9)	4.2 (2.9-5.5)	3.4 (2.4-4.4)
2	16 (9.9-26)	14 (8.7-22)	12 (7.5-17)	9.7 (6.1-14)	7.8 (4.9-11)	6.3 (3.9-8.9)	5.1 (3.2-7.1)
3	24 (14-36)	21 (13-31)	18 (11-26)	15 (9.0-21)	12 (7.2-17)	9.5 (5.7-14)	7.6 (4.6-11)
4	34 (20-45)	31 (19-41)	27 (17-37)	22 (14-30)	18 (11-25)	14 (8.9-20)	11 (7.1-16)
5	45 (30-54)	42 (28-51)	38 (26-46)	32 (21-39)	26 (17-33)	21 (14-27)	17 (11-22)
6	56	53	50	43	36	30	25

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.9	5.1	4.6	3.7	3.0	2.4	2.0
1	9.8 (6.7-16)	8.4 (5.8-13)	7.2 (5.1-10)	5.8 (4.0-8.3)	4.6 (3.2-6.6)	3.7 (2.6-5.2)	3.0 (2.1-4.1)
2	16 (9.6-25)	13 (8.1-21)	11 (7.0-17)	9.0 (5.5-13)	7.2 (4.4-11)	5.7 (3.5-8.4)	4.6 (2.8-6.6)
3	24 (14-35)	20 (12-30)	17 (10-25)	14 (8.2-20)	11 (6.5-16)	8.8 (5.1-13)	7.0 (4.1-10)
4	34 (20-45)	30 (18-40)	26 (16-35)	21 (13-29)	17 (10-24)	13 (8.1-19)	11 (6.4-15)
5	45 (30-54)	41 (27-50)	37 (24-45)	30 (20-38)	25 (16-32)	20 (13-26)	16 (10-21)
6	57	53	49	42	35	29	24