

The US (Caucasian) - 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 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 the US (Caucasian). 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/m².

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	20	13	8.9	6.6	5.2	4.2	3.6	3.1	2.8	2.7	2.6
1	29 (26-36)	19 (17-24)	14 (11-17)	9.9 (7.8-13)	7.8 (5.7-9.7)	6.4 (4.4-8.2)	5.4 (3.6-7.2)	4.7 (3.1-6.4)	4.3 (2.8-5.9)	4.1 (2.6-5.7)	3.9 (2.5-5.5)
2	41 (33-54)	28 (23-38)	20 (15-27)	15 (10-21)	11 (7.3-17)	9.3 (5.5-15)	7.9 (4.4-13)	6.9 (3.7-12)	6.3 (3.3-11)	6.0 (3.1-10)	5.7 (2.9-10)
3	55 (42-67)	39 (30-49)	28 (21-39)	21 (14-32)	16 (9.7-27)	13 (7.3-23)	11 (5.8-20)	9.9 (4.8-18)	9.0 (4.3-17)	8.6 (4.0-16)	8.3 (3.8-16)
4	69 (54-79)	53 (38-62)	39 (27-48)	30 (20-40)	23 (16-34)	19 (12-29)	16 (9.4-26)	14 (7.7-23)	13 (6.8-21)	12 (6.4-20)	12 (6.1-20)
5	80 (72-86)	66 (56-72)	52 (42-57)	40 (31-47)	32 (25-39)	26 (20-34)	22 (17-30)	19 (14-27)	18 (12-25)	17 (12-24)	16 (11-23)
6	88	78	65	52	42	35	30	26	24	23	22

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

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	22	16	11	8.7	6.9	5.7	4.9	4.2	3.9	3.7	3.5
1	32 (29-38)	23 (20-27)	17 (14-20)	13 (9.9-16)	10 (7.5-13)	8.5 (5.9-11)	7.2 (4.8-9.7)	6.2 (4.1-8.5)	5.7 (3.7-8.0)	5.4 (3.5-7.6)	5.1 (3.3-7.3)
2	44 (37-55)	32 (26-42)	24 (18-32)	18 (13-26)	15 (9.5-22)	12 (7.3-19)	10 (5.9-17)	9.0 (4.9-15)	8.3 (4.4-14)	7.8 (4.1-13)	7.5 (3.9-13)
3	57 (46-67)	44 (34-55)	33 (24-46)	26 (17-39)	21 (12-33)	17 (9.6-29)	15 (7.7-26)	13 (6.4-23)	12 (5.7-21)	11 (5.3-20)	11 (5.0-20)
4	70 (57-77)	56 (43-65)	44 (33-55)	35 (25-47)	29 (20-41)	24 (15-36)	20 (12-32)	18 (10-28)	16 (9.0-27)	15 (8.4-26)	15 (7.9-25)
5	80 (73-84)	68 (60-74)	56 (48-64)	46 (38-55)	38 (31-47)	32 (26-41)	27 (21-37)	24 (18-33)	22 (16-31)	21 (15-29)	20 (14-28)
6	87	79	68	58	49	42	36	32	29	28	27

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	23	17	13	10	8.1	6.7	5.6	4.8	4.5	4.2	3.9
1	32 (29-37)	24 (21-28)	18 (15-22)	15 (11-17)	12 (8.6-15)	9.7 (6.8-13)	8.2 (5.6-11)	7.0 (4.7-9.6)	6.5 (4.3-9.1)	6.1 (3.9-8.6)	5.7 (3.7-8.1)
2	43 (37-53)	33 (27-42)	26 (20-34)	21 (14-29)	17 (11-25)	14 (8.5-21)	12 (6.9-19)	10 (5.7-16)	9.3 (5.1-15)	8.7 (4.7-15)	8.2 (4.4-14)
3	55 (46-65)	44 (36-56)	35 (26-48)	28 (19-41)	23 (14-36)	19 (11-31)	16 (8.9-28)	14 (7.4-25)	13 (6.6-23)	12 (6.1-22)	12 (5.6-21)
4	67 (56-74)	56 (45-65)	46 (35-57)	37 (28-50)	31 (22-44)	26 (17-39)	22 (14-34)	19 (12-31)	18 (10-29)	17 (9.4-28)	16 (8.7-26)
5	77 (71-81)	67 (60-73)	57 (50-65)	48 (41-57)	40 (34-50)	34 (28-44)	30 (23-39)	26 (19-35)	24 (17-33)	23 (16-32)	21 (15-30)
6	83	76	68	59	51	44	38	34	32	30	28

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

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	23	17	13	10	8.4	6.9	5.8	5.0	4.6	4.2	3.9
1	31 (28-35)	24 (21-27)	19 (15-22)	15 (12-18)	12 (9.0-15)	10 (7.1-13)	8.3 (5.8-11)	7.2 (4.9-9.9)	6.6 (4.4-9.1)	6.1 (4.0-8.5)	5.6 (3.6-8.0)
2	41 (36-49)	33 (27-40)	26 (20-33)	21 (15-28)	17 (12-24)	14 (9.0-21)	12 (7.2-18)	10 (6.0-16)	9.3 (5.3-15)	8.6 (4.8-14)	8.0 (4.3-13)
3	52 (44-61)	42 (35-53)	34 (26-46)	28 (20-40)	23 (15-35)	19 (12-30)	16 (9.4-27)	14 (7.8-24)	13 (6.9-22)	12 (6.2-21)	11 (5.6-20)
4	62 (54-70)	53 (44-62)	44 (35-55)	37 (29-48)	31 (23-43)	26 (18-37)	22 (14-33)	19 (12-30)	18 (11-28)	16 (9.4-26)	15 (8.6-25)
5	71 (66-76)	63 (57-70)	54 (48-62)	46 (40-55)	39 (34-49)	34 (28-43)	29 (23-38)	25 (19-34)	23 (17-32)	22 (15-30)	20 (14-29)
6	78	71	64	56	49	42	37	33	30	28	26

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	23	18	14	11	8.9	7.2	6.0	5.2	4.6	4.2	3.8
1	31 (27-38)	25 (21-30)	20 (16-23)	16 (12-19)	12 (9.5-15)	10 (7.5-12)	8.3 (6.0-9.8)	7.1 (5.1-8.4)	6.4 (4.5-7.5)	5.7 (4.0-6.9)	5.2 (3.6-6.3)
2	42 (34-51)	34 (27-42)	27 (21-34)	21 (16-28)	17 (12-23)	14 (9.6-19)	11 (7.6-15)	9.7 (6.4-13)	8.6 (5.5-12)	7.8 (4.9-11)	7.0 (4.3-9.8)
3	53 (44-63)	44 (35-55)	36 (27-47)	29 (21-39)	23 (16-33)	19 (13-27)	15 (10-23)	13 (8.4-20)	12 (7.2-18)	10 (6.3-16)	9.4 (5.6-15)
4	64 (55-71)	55 (46-64)	47 (37-55)	38 (30-48)	31 (24-40)	25 (19-34)	21 (15-29)	18 (13-25)	16 (11-22)	14 (9.5-20)	12 (8.5-19)
5	72 (66-77)	65 (58-71)	57 (50-64)	49 (42-56)	41 (34-48)	34 (28-41)	28 (23-34)	23 (19-30)	20 (17-27)	18 (15-24)	16 (14-22)
6	78	73	67	59	51	43	36	31	27	24	21

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

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	23	18	14	12	9.4	7.6	6.2	5.4	4.8	4.3	3.8
1	33 (26-50)	27 (21-41)	21 (16-33)	17 (13-26)	14 (10-20)	11 (8.0-16)	8.9 (6.4-12)	7.6 (5.4-9.8)	6.6 (4.7-8.1)	5.8 (4.1-6.7)	5.1 (3.6-6.0)
2	44 (33-60)	37 (27-52)	31 (21-44)	25 (17-36)	20 (13-29)	16 (10-23)	13 (8.3-18)	11 (6.9-15)	9.1 (5.9-12)	7.8 (5.1-10)	6.9 (4.5-8.9)
3	56 (42-69)	49 (34-61)	41 (28-54)	34 (22-46)	28 (17-38)	22 (14-31)	18 (11-25)	15 (9.2-21)	13 (7.8-18)	11 (6.7-15)	9.2 (5.8-13)
4	66 (51-75)	60 (44-69)	53 (37-63)	45 (30-56)	38 (24-48)	31 (20-40)	25 (16-32)	21 (13-27)	17 (11-23)	15 (9.8-20)	13 (8.6-17)
5	74 (60-79)	69 (53-75)	63 (46-70)	56 (40-64)	49 (33-56)	42 (27-48)	34 (23-41)	29 (19-34)	24 (17-29)	20 (15-25)	17 (13-21)
6	80	77	72	67	60	53	45	38	33	27	23

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	23	19	15	13	10	8.5	7.1	6.2	5.4	4.8	4.3
1	32 (25-48)	27 (20-41)	22 (17-34)	18 (13-28)	15 (11-23)	12 (8.8-18)	10 (7.2-15)	8.7 (6.2-12)	7.5 (5.3-10)	6.6 (4.6-8.5)	5.8 (4.1-7.2)
2	42 (32-58)	36 (26-51)	31 (22-44)	26 (18-37)	21 (14-31)	17 (12-26)	14 (9.5-21)	12 (8.0-18)	10 (6.9-15)	9.1 (5.9-13)	7.9 (5.1-11)
3	53 (39-65)	47 (33-59)	41 (28-53)	35 (23-46)	29 (19-40)	24 (15-33)	20 (13-28)	17 (11-23)	15 (9.1-20)	12 (7.8-17)	11 (6.8-15)
4	62 (47-72)	57 (41-67)	51 (35-61)	45 (30-55)	39 (25-48)	33 (21-41)	28 (17-35)	24 (15-30)	20 (13-26)	17 (11-22)	15 (9.6-19)
5	71 (55-76)	66 (50-72)	61 (44-67)	55 (38-62)	49 (33-56)	43 (28-49)	37 (23-43)	32 (20-38)	27 (18-33)	23 (16-28)	20 (14-25)
6	77	74	70	65	59	53	47	41	36	31	27

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

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	20	17	14	12	9.8	8.2	7.0	6.1	5.4	4.8	4.2
1	28 (22-43)	24 (18-37)	20 (15-32)	17 (13-26)	14 (10-22)	12 (8.5-18)	10 (7.2-15)	8.7 (6.2-13)	7.6 (5.4-11)	6.7 (4.7-9.2)	5.8 (4.1-7.8)
2	38 (28-53)	33 (24-47)	28 (20-41)	24 (16-35)	20 (14-30)	17 (11-25)	14 (9.5-21)	12 (8.2-18)	11 (7.0-16)	9.4 (6.1-14)	8.2 (5.3-12)
3	49 (35-62)	43 (30-56)	38 (26-50)	33 (22-45)	28 (18-39)	24 (15-33)	20 (13-28)	18 (11-24)	15 (9.4-21)	13 (8.1-18)	11 (7.0-16)
4	59 (44-68)	54 (38-64)	48 (33-59)	43 (28-53)	38 (24-47)	33 (20-41)	28 (17-36)	25 (15-31)	21 (13-27)	18 (11-24)	16 (10-21)
5	68 (52-73)	64 (47-70)	59 (41-65)	54 (36-61)	48 (31-55)	43 (27-49)	38 (23-44)	33 (21-39)	29 (18-35)	25 (16-30)	22 (14-27)
6	74	72	68	64	59	53	48	43	39	34	30

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	14	12	9.9	8.4	7.1	5.9	5.2	4.6	4.1	3.6	3.2
1	20 (14-31)	17 (12-27)	14 (10-23)	12 (8.7-20)	10 (7.3-17)	8.8 (6.2-14)	7.6 (5.3-12)	6.7 (4.7-10)	5.9 (4.1-9.0)	5.2 (3.6-7.8)	4.6 (3.2-6.8)
2	28 (19-40)	24 (16-35)	21 (14-31)	18 (12-27)	15 (9.8-23)	13 (8.3-20)	11 (7.2-17)	9.8 (6.3-15)	8.6 (5.5-13)	7.5 (4.8-11)	6.6 (4.2-9.9)
3	37 (25-49)	33 (21-45)	29 (18-40)	25 (16-35)	22 (13-30)	18 (11-26)	16 (9.7-23)	14 (8.4-20)	12 (7.4-18)	11 (6.5-15)	9.5 (5.6-13)
4	47 (32-58)	43 (28-53)	38 (24-48)	34 (21-43)	30 (18-38)	26 (15-34)	23 (13-30)	20 (12-26)	18 (10-23)	16 (9.0-20)	14 (7.9-18)
5	58 (40-64)	53 (35-60)	49 (31-56)	44 (27-51)	40 (24-46)	35 (20-41)	31 (18-37)	28 (16-33)	25 (14-30)	22 (12-26)	19 (11-23)
6	67	63	59	55	51	46	42	38	34	30	27