

The US (Black) - The probabilities of a hip fracture in men

The following tables give the 10-year probability (%) of a hip 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 (Black). 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	6.4	3.4	1.8	1.0	0.5	0.3	0.1	0.1	0.0	0.0	0.0
1	10 (6.7-13)	5.4 (3.6-7.2)	2.9 (1.9-3.8)	1.5 (1.0-2.0)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	15 (9.4-22)	8.4 (5.1-12)	4.5 (2.7-6.8)	2.4 (1.4-3.6)	1.3 (0.8-1.9)	0.7 (0.4-1.0)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
3	22 (14-33)	13 (7.6-19)	7.0 (4.1-11)	3.7 (2.2-5.9)	2.0 (1.1-3.2)	1.1 (0.6-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
4	32 (22-44)	19 (12-28)	11 (6.7-16)	5.7 (3.6-8.8)	3.1 (1.9-4.8)	1.6 (1.0-2.6)	0.9 (0.5-1.4)	0.5 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
5	44 (34-55)	27 (20-36)	16 (12-22)	8.7 (6.3-12)	4.7 (3.4-6.7)	2.5 (1.8-3.6)	1.3 (1.0-1.9)	0.7 (0.5-1.0)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
6	57	38	23	13	7.0	3.8	2.0	1.1	0.6	0.3	0.2

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

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	6.5	3.6	2.0	1.1	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	9.9 (6.8-12)	5.6 (3.8-7.0)	3.1 (2.1-3.9)	1.7 (1.2-2.1)	0.9 (0.6-1.2)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	15 (9.5-20)	8.4 (5.3-12)	4.7 (3.0-6.8)	2.6 (1.6-3.8)	1.4 (0.9-2.1)	0.8 (0.5-1.2)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	21 (14-30)	13 (8.0-18)	7.2 (4.5-11)	4.0 (2.5-6.0)	2.2 (1.4-3.3)	1.2 (0.8-1.9)	0.7 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	30 (22-41)	18 (13-26)	11 (7.2-16)	6.0 (4.0-9.0)	3.4 (2.2-5.1)	1.9 (1.2-2.8)	1.0 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	40 (33-51)	26 (21-34)	15 (12-21)	8.9 (6.9-12)	5.0 (3.9-7.1)	2.8 (2.1-4.0)	1.5 (1.2-2.2)	0.9 (0.7-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
6	52	35	22	13	7.4	4.2	2.3	1.3	0.7	0.4	0.2

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	6.0	3.5	2.1	1.2	0.7	0.4	0.2	0.1	0.1	0.1	0.0
1	8.9 (6.3-11)	5.3 (3.7-6.3)	3.1 (2.2-3.7)	1.8 (1.3-2.2)	1.1 (0.7-1.3)	0.6 (0.4-0.8)	0.4 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
2	13 (8.8-17)	7.9 (5.2-11)	4.7 (3.1-6.4)	2.8 (1.8-3.8)	1.6 (1.1-2.2)	1.0 (0.6-1.3)	0.6 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	19 (13-25)	11 (7.9-16)	6.9 (4.7-9.6)	4.1 (2.7-5.8)	2.4 (1.6-3.5)	1.4 (0.9-2.0)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	26 (19-34)	16 (12-22)	10 (7.3-14)	6.1 (4.3-8.7)	3.6 (2.6-5.2)	2.1 (1.5-3.1)	1.3 (0.9-1.8)	0.7 (0.5-1.1)	0.4 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
5	34 (29-43)	23 (19-30)	14 (12-19)	8.8 (7.2-12)	5.3 (4.3-7.3)	3.1 (2.6-4.4)	1.9 (1.5-2.6)	1.1 (0.9-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
6	44	31	20	13	7.7	4.6	2.7	1.6	1.0	0.6	0.4

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

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	5.7	3.6	2.2	1.4	0.9	0.5	0.3	0.2	0.1	0.1	0.1
1	8.2 (5.9-9.3)	5.2 (3.7-5.9)	3.3 (2.3-3.7)	2.0 (1.4-2.3)	1.3 (0.9-1.5)	0.8 (0.6-0.9)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.1-0.1)
2	12 (8.3-15)	7.5 (5.3-9.6)	4.8 (3.3-6.1)	3.0 (2.1-3.9)	1.9 (1.3-2.4)	1.2 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.2)
3	16 (12-21)	11 (7.9-14)	6.9 (5.0-9.1)	4.3 (3.1-5.8)	2.7 (1.9-3.7)	1.7 (1.2-2.3)	1.1 (0.7-1.4)	0.7 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
4	22 (18-29)	15 (12-20)	9.8 (7.5-13)	6.2 (4.8-8.5)	3.9 (3.0-5.5)	2.5 (1.9-3.4)	1.5 (1.2-2.2)	1.0 (0.7-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
5	30 (26-37)	20 (18-26)	14 (12-18)	8.8 (7.7-12)	5.6 (4.9-7.6)	3.6 (3.1-4.9)	2.2 (1.9-3.1)	1.4 (1.2-1.9)	0.9 (0.8-1.3)	0.6 (0.5-0.8)	0.4 (0.3-0.5)
6	38	27	19	12	8.0	5.1	3.2	2.0	1.3	0.8	0.5

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	5.7	3.8	2.5	1.7	1.1	0.7	0.5	0.3	0.2	0.1	0.1
1	8.9 (7.9-12)	6.0 (5.3-7.9)	4.0 (3.5-5.3)	2.7 (2.3-3.5)	1.8 (1.5-2.3)	1.2 (1.0-1.5)	0.8 (0.7-1.0)	0.5 (0.4-0.7)	0.3 (0.3-0.5)	0.2 (0.2-0.3)	0.2 (0.1-0.2)
2	14 (11-18)	9.4 (7.7-12)	6.4 (5.2-8.4)	4.3 (3.5-5.6)	2.8 (2.3-3.8)	1.9 (1.5-2.5)	1.2 (1.0-1.7)	0.8 (0.7-1.1)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.3 (0.2-0.4)
3	20 (16-25)	14 (11-18)	9.9 (7.7-13)	6.7 (5.2-8.5)	4.5 (3.5-5.8)	3.0 (2.3-3.8)	2.0 (1.5-2.6)	1.3 (1.0-1.7)	0.9 (0.7-1.2)	0.6 (0.5-0.8)	0.4 (0.3-0.5)
4	29 (23-34)	21 (17-25)	15 (12-18)	10 (7.9-13)	7.1 (5.3-8.6)	4.8 (3.5-5.8)	3.2 (2.4-3.9)	2.1 (1.6-2.6)	1.5 (1.1-1.8)	1.0 (0.7-1.2)	0.7 (0.5-0.8)
5	39 (32-43)	30 (24-33)	22 (17-24)	16 (12-17)	11 (8.2-12)	7.4 (5.6-8.2)	5.0 (3.7-5.6)	3.4 (2.5-3.8)	2.3 (1.8-2.6)	1.6 (1.2-1.8)	1.1 (0.8-1.2)
6	50	40	31	23	16	11	7.8	5.3	3.7	2.5	1.7

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

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	6.0	4.3	3.0	2.1	1.5	1.0	0.7	0.5	0.4	0.3	0.2
1	11 (8.3-23)	7.9 (5.9-17)	5.7 (4.2-12)	4.0 (3.0-8.7)	2.8 (2.1-6.2)	2.0 (1.4-4.3)	1.4 (1.0-3.0)	1.0 (0.7-2.2)	0.7 (0.5-1.6)	0.5 (0.4-1.1)	0.4 (0.3-0.8)
2	18 (11-31)	13 (8.3-24)	9.9 (5.9-18)	7.1 (4.2-13)	5.1 (2.9-9.5)	3.6 (2.0-6.8)	2.5 (1.4-4.8)	1.8 (1.0-3.5)	1.3 (0.7-2.5)	0.9 (0.5-1.8)	0.7 (0.4-1.3)
3	27 (16-40)	21 (11-32)	16 (8.3-25)	12 (5.9-19)	8.6 (4.2-14)	6.2 (3.0-10)	4.4 (2.1-7.2)	3.2 (1.5-5.2)	2.3 (1.1-3.8)	1.7 (0.8-2.8)	1.2 (0.6-2.0)
4	39 (21-49)	31 (16-41)	25 (12-33)	19 (8.7-25)	14 (6.3-19)	10 (4.5-14)	7.3 (3.1-10)	5.4 (2.3-7.4)	3.9 (1.6-5.4)	2.9 (1.2-3.9)	2.1 (0.8-2.9)
5	50 (29-57)	43 (23-49)	35 (17-41)	28 (13-33)	21 (9.3-25)	16 (6.7-19)	12 (4.8-14)	8.8 (3.5-10)	6.5 (2.6-7.5)	4.8 (1.9-5.5)	3.5 (1.3-4.0)
6	61	54	47	39	31	24	18	14	10	7.7	5.7

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	6.2	4.6	3.4	2.5	1.9	1.4	1.0	0.8	0.6	0.4	0.3
1	11 (8.1-23)	8.4 (6.0-18)	6.3 (4.5-14)	4.7 (3.3-10)	3.5 (2.4-7.8)	2.6 (1.8-5.8)	1.9 (1.3-4.3)	1.5 (1.0-3.3)	1.1 (0.8-2.5)	0.8 (0.6-1.9)	0.6 (0.4-1.4)
2	18 (11-31)	14 (8.1-25)	11 (6.1-20)	8.2 (4.6-15)	6.2 (3.4-12)	4.6 (2.5-8.8)	3.4 (1.9-6.6)	2.6 (1.4-5.1)	2.0 (1.1-3.9)	1.5 (0.8-3.0)	1.1 (0.6-2.3)
3	27 (15-40)	22 (11-33)	17 (8.5-27)	13 (6.4-22)	10 (4.8-17)	7.7 (3.6-13)	5.8 (2.7-9.8)	4.5 (2.0-7.6)	3.4 (1.5-5.9)	2.6 (1.2-4.5)	2.0 (0.9-3.4)
4	37 (20-48)	31 (16-42)	25 (12-35)	20 (9.3-28)	16 (7.0-22)	12 (5.3-17)	9.5 (4.0-13)	7.4 (3.1-11)	5.7 (2.3-8.2)	4.4 (1.8-6.3)	3.3 (1.4-4.8)
5	48 (27-55)	42 (22-48)	35 (17-41)	29 (14-34)	24 (10-28)	19 (7.9-22)	15 (6.0-18)	12 (4.6-14)	9.1 (3.6-11)	7.1 (2.7-8.6)	5.5 (2.1-6.7)
6	59	53	47	40	33	27	22	18	14	11	8.6

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

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	5.4	4.2	3.2	2.5	1.9	1.5	1.2	0.9	0.7	0.6	0.5
1	9.7 (7.0-20)	7.7 (5.5-16)	6.0 (4.2-13)	4.7 (3.3-10)	3.7 (2.5-8.1)	2.8 (2.0-6.3)	2.2 (1.5-5.0)	1.8 (1.2-3.9)	1.4 (1.0-3.1)	1.1 (0.8-2.5)	0.9 (0.6-2.0)
2	16 (9.5-28)	13 (7.5-23)	10 (5.9-19)	8.2 (4.6-15)	6.4 (3.6-12)	5.0 (2.8-9.6)	4.0 (2.2-7.6)	3.2 (1.7-6.2)	2.5 (1.4-4.9)	2.0 (1.1-3.9)	1.6 (0.9-3.2)
3	25 (13-38)	20 (10-32)	17 (8.2-26)	13 (6.4-22)	11 (5.0-18)	8.4 (3.9-14)	6.7 (3.1-11)	5.4 (2.5-9.1)	4.4 (2.0-7.4)	3.5 (1.6-5.9)	2.8 (1.2-4.8)
4	35 (18-46)	30 (15-40)	25 (12-34)	21 (9.4-28)	17 (7.4-23)	13 (5.8-19)	11 (4.6-15)	8.9 (3.7-13)	7.2 (3.0-10)	5.8 (2.4-8.3)	4.6 (1.9-6.7)
5	47 (25-53)	41 (21-47)	35 (17-41)	30 (14-35)	25 (11-29)	20 (8.7-24)	17 (6.9-20)	14 (5.6-17)	11 (4.5-14)	9.3 (3.6-11)	7.5 (2.9-9.2)
6	58	53	47	41	35	30	25	21	17	14	12

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	3.6	2.9	2.4	1.9	1.5	1.2	1.0	0.9	0.7	0.6	0.5
1	6.6 (4.7-14)	5.4 (3.8-12)	4.4 (3.1-9.7)	3.6 (2.5-7.9)	2.9 (2.0-6.5)	2.4 (1.6-5.3)	2.0 (1.4-4.4)	1.6 (1.1-3.7)	1.4 (0.9-3.0)	1.1 (0.8-2.5)	0.9 (0.6-2.1)
2	11 (6.4-20)	9.3 (5.2-17)	7.7 (4.3-14)	6.3 (3.5-12)	5.1 (2.8-9.7)	4.2 (2.3-8.0)	3.5 (1.9-6.7)	2.9 (1.6-5.6)	2.4 (1.3-4.7)	2.0 (1.1-4.0)	1.7 (0.9-3.3)
3	18 (8.8-28)	15 (7.3-24)	12 (6.0-20)	10 (4.9-17)	8.6 (4.0-14)	7.1 (3.2-12)	5.9 (2.7-10)	5.0 (2.3-8.4)	4.2 (1.9-7.1)	3.5 (1.6-6.0)	2.9 (1.3-5.0)
4	26 (13-36)	23 (11-31)	19 (8.7-27)	16 (7.2-23)	14 (5.9-19)	11 (4.8-16)	9.6 (4.1-14)	8.2 (3.4-12)	6.9 (2.8-9.8)	5.8 (2.4-8.3)	4.9 (2.0-7.0)
5	37 (18-43)	33 (15-38)	28 (13-33)	24 (11-29)	21 (8.8-24)	17 (7.2-21)	15 (6.1-18)	13 (5.1-15)	11 (4.3-13)	9.3 (3.6-11)	7.9 (3.0-9.5)
6	49	44	39	35	30	26	22	19	17	14	12