

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

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	4.9	2.6	1.3	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0
1	7.9 (5.2-10)	4.1 (2.7-5.4)	2.1 (1.4-2.8)	1.1 (0.7-1.4)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	12 (7.3-18)	6.5 (3.8-9.8)	3.4 (2.0-5.1)	1.7 (1.0-2.6)	0.9 (0.5-1.4)	0.5 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
3	19 (11-29)	10 (5.7-16)	5.3 (3.0-8.6)	2.7 (1.5-4.5)	1.4 (0.8-2.3)	0.7 (0.4-1.2)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
4	28 (18-41)	15 (9.7-24)	8.2 (5.1-13)	4.3 (2.6-6.8)	2.2 (1.3-3.5)	1.1 (0.7-1.8)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
5	39 (31-52)	23 (17-32)	12 (9.2-18)	6.6 (4.8-9.5)	3.4 (2.5-5.0)	1.8 (1.3-2.6)	0.9 (0.7-1.3)	0.5 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
6	54	33	19	10	5.2	2.7	1.4	0.7	0.4	0.2	0.1

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	5.1	2.8	1.5	0.8	0.4	0.2	0.1	0.1	0.0	0.0	0.0
1	8.0 (5.4-9.8)	4.4 (2.9-5.4)	2.4 (1.6-2.9)	1.3 (0.9-1.6)	0.7 (0.5-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	12 (7.6-17)	6.8 (4.1-9.8)	3.7 (2.2-5.4)	2.0 (1.2-2.9)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
3	18 (11-28)	10 (6.2-16)	5.8 (3.4-9.0)	3.1 (1.8-5.0)	1.7 (1.0-2.7)	0.9 (0.5-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
4	27 (19-39)	16 (10-23)	8.8 (5.8-13)	4.8 (3.1-7.5)	2.6 (1.7-4.1)	1.4 (0.9-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
5	38 (31-50)	23 (18-31)	13 (10-19)	7.3 (5.7-10)	4.0 (3.1-5.8)	2.2 (1.7-3.2)	1.2 (0.9-1.7)	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	52	33	19	11	6.1	3.3	1.8	1.0	0.6	0.3	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	5.6	3.2	1.8	1.0	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	8.5 (5.9-10)	4.9 (3.3-5.7)	2.7 (1.9-3.2)	1.5 (1.0-1.8)	0.9 (0.6-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	13 (8.2-17)	7.4 (4.7-10)	4.2 (2.6-5.8)	2.4 (1.5-3.3)	1.3 (0.8-1.9)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	19 (12-27)	11 (7.1-16)	6.4 (4.0-9.6)	3.6 (2.3-5.5)	2.0 (1.3-3.1)	1.1 (0.7-1.8)	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	27 (20-38)	16 (12-24)	9.6 (6.7-14)	5.5 (3.8-8.3)	3.1 (2.1-4.7)	1.8 (1.2-2.7)	1.0 (0.7-1.5)	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	38 (33-49)	24 (20-32)	14 (12-20)	8.2 (6.8-12)	4.7 (3.9-6.6)	2.6 (2.2-3.8)	1.5 (1.2-2.2)	0.9 (0.7-1.3)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
6	51	33	20	12	7.0	4.0	2.3	1.3	0.8	0.4	0.3

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	6.2	3.7	2.2	1.3	0.7	0.4	0.3	0.2	0.1	0.1	0.0
1	9.4 (6.6-11)	5.6 (3.9-6.6)	3.3 (2.3-3.9)	1.9 (1.3-2.3)	1.1 (0.8-1.3)	0.6 (0.4-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	14 (9.2-18)	8.3 (5.4-11)	4.9 (3.2-6.4)	2.9 (1.9-3.8)	1.7 (1.1-2.2)	1.0 (0.6-1.3)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
3	20 (14-27)	12 (8.2-17)	7.3 (4.8-10)	4.3 (2.8-6.2)	2.5 (1.7-3.7)	1.5 (1.0-2.2)	0.9 (0.6-1.3)	0.5 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	28 (22-38)	18 (13-25)	11 (8.0-15)	6.4 (4.7-9.3)	3.8 (2.8-5.6)	2.2 (1.6-3.3)	1.3 (1.0-2.0)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
5	38 (33-48)	25 (21-33)	16 (13-21)	9.4 (7.8-13)	5.6 (4.6-7.8)	3.3 (2.7-4.6)	2.0 (1.6-2.8)	1.2 (1.0-1.7)	0.7 (0.6-1.0)	0.4 (0.4-0.6)	0.3 (0.2-0.4)
6	50	34	22	14	8.2	4.9	3.0	1.8	1.1	0.7	0.4

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	7.4	4.6	2.8	1.7	1.0	0.6	0.4	0.3	0.2	0.1	0.1
1	12 (10-15)	7.5 (6.4-9.5)	4.6 (3.9-5.9)	2.8 (2.4-3.6)	1.7 (1.5-2.2)	1.1 (0.9-1.4)	0.7 (0.6-0.9)	0.4 (0.4-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	19 (15-25)	12 (9.6-16)	7.6 (6.0-10)	4.7 (3.7-6.4)	2.9 (2.2-3.9)	1.8 (1.4-2.4)	1.1 (0.9-1.5)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	29 (23-36)	19 (14-25)	12 (9.1-16)	7.7 (5.6-10)	4.8 (3.4-6.3)	3.0 (2.1-4.0)	1.9 (1.3-2.5)	1.2 (0.8-1.6)	0.7 (0.5-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.4)
4	42 (34-49)	29 (22-35)	19 (14-23)	12 (9.1-15)	7.7 (5.6-9.6)	4.9 (3.5-6.1)	3.1 (2.2-3.9)	2.0 (1.4-2.5)	1.2 (0.9-1.6)	0.8 (0.6-1.0)	0.5 (0.4-0.6)
5	57 (49-61)	43 (35-47)	29 (24-33)	19 (15-22)	12 (9.7-14)	7.9 (6.1-9.1)	5.1 (3.9-5.9)	3.2 (2.5-3.7)	2.0 (1.6-2.4)	1.3 (1.0-1.5)	0.8 (0.6-1.0)
6	71	57	43	30	19	13	8.2	5.3	3.4	2.1	1.4

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	9.0	5.8	3.7	2.4	1.5	1.0	0.7	0.4	0.3	0.2	0.1
1	17 (12-33)	11 (8.1-23)	7.3 (5.3-15)	4.7 (3.4-9.9)	3.0 (2.1-6.4)	2.0 (1.4-4.3)	1.3 (0.9-2.8)	0.9 (0.6-1.9)	0.6 (0.4-1.2)	0.4 (0.3-0.8)	0.2 (0.2-0.5)
2	28 (17-48)	20 (11-35)	13 (7.4-25)	8.7 (4.8-17)	5.7 (3.0-11)	3.8 (2.0-7.4)	2.5 (1.3-5.0)	1.7 (0.9-3.3)	1.1 (0.6-2.2)	0.7 (0.4-1.5)	0.5 (0.3-1.0)
3	43 (25-61)	31 (17-47)	22 (11-35)	15 (7.2-25)	10 (4.6-17)	6.8 (3.0-12)	4.5 (2.0-7.8)	3.0 (1.3-5.3)	2.0 (0.9-3.5)	1.3 (0.6-2.3)	0.9 (0.4-1.6)
4	58 (36-70)	47 (25-59)	35 (17-46)	25 (11-34)	17 (7.4-24)	12 (4.9-17)	8.0 (3.3-12)	5.4 (2.2-7.9)	3.6 (1.4-5.3)	2.4 (0.9-3.6)	1.6 (0.6-2.4)
5	72 (50-78)	62 (38-68)	50 (27-57)	38 (18-44)	27 (12-32)	19 (8.4-23)	13 (5.6-16)	9.2 (3.8-11)	6.2 (2.5-7.5)	4.1 (1.7-5.0)	2.8 (1.1-3.4)
6	82	76	66	54	41	31	22	15	10	7.1	4.7

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	10	6.8	4.6	3.1	2.1	1.4	1.0	0.7	0.5	0.3	0.2
1	18 (13-35)	13 (8.8-26)	8.7 (6.0-18)	5.9 (4.0-13)	4.1 (2.7-8.7)	2.8 (1.9-6.1)	2.0 (1.3-4.3)	1.4 (0.9-3.0)	0.9 (0.6-2.1)	0.7 (0.4-1.4)	0.4 (0.3-1.0)
2	29 (18-50)	21 (12-38)	15 (8.4-29)	11 (5.7-20)	7.4 (3.9-15)	5.2 (2.7-10)	3.7 (1.9-7.3)	2.5 (1.3-5.1)	1.8 (0.9-3.6)	1.2 (0.6-2.5)	0.8 (0.4-1.7)
3	43 (25-61)	33 (18-50)	25 (12-39)	18 (8.5-29)	13 (5.8-21)	9.1 (4.1-15)	6.5 (2.8-11)	4.5 (2.0-7.9)	3.2 (1.4-5.6)	2.2 (0.9-3.9)	1.5 (0.6-2.7)
4	57 (35-70)	48 (26-60)	37 (19-50)	28 (13-39)	21 (9.0-30)	15 (6.4-22)	11 (4.5-16)	7.8 (3.1-12)	5.5 (2.2-8.4)	3.9 (1.5-5.9)	2.7 (1.0-4.2)
5	70 (48-76)	62 (38-68)	52 (28-59)	42 (20-49)	32 (15-38)	24 (11-30)	18 (7.5-22)	13 (5.3-16)	9.2 (3.7-12)	6.5 (2.6-8.3)	4.6 (1.8-5.8)
6	79	74	66	56	46	36	28	21	15	11	7.6

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	8.8	6.3	4.4	3.1	2.3	1.6	1.2	0.9	0.6	0.5	0.3
1	16 (11-32)	12 (8.2-24)	8.4 (5.8-18)	6.0 (4.1-13)	4.4 (3.0-9.4)	3.2 (2.2-7.0)	2.3 (1.6-5.1)	1.7 (1.1-3.7)	1.2 (0.8-2.7)	0.9 (0.6-2.0)	0.7 (0.4-1.4)
2	26 (16-45)	20 (11-36)	15 (8.1-27)	11 (5.7-20)	7.9 (4.2-15)	5.9 (3.1-12)	4.3 (2.2-8.6)	3.2 (1.6-6.3)	2.3 (1.2-4.7)	1.7 (0.9-3.4)	1.2 (0.6-2.5)
3	39 (23-57)	31 (17-47)	24 (12-38)	18 (8.6-29)	14 (6.3-22)	10 (4.6-17)	7.6 (3.4-13)	5.6 (2.5-9.6)	4.1 (1.8-7.1)	3.0 (1.3-5.3)	2.2 (0.9-3.9)
4	53 (32-66)	45 (24-57)	36 (18-48)	28 (13-39)	22 (9.6-31)	17 (7.1-24)	13 (5.3-19)	9.5 (3.9-14)	7.1 (2.8-11)	5.2 (2.1-7.9)	3.8 (1.5-5.8)
5	66 (43-72)	59 (35-66)	50 (27-57)	41 (20-48)	33 (15-40)	26 (12-32)	20 (8.6-25)	16 (6.4-19)	12 (4.7-15)	8.7 (3.5-11)	6.4 (2.6-8.2)
6	77	71	64	56	47	39	31	24	19	14	11

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	6.1	4.5	3.4	2.5	1.9	1.5	1.1	0.9	0.7	0.5	0.4
1	11 (7.9-23)	8.5 (5.9-18)	6.4 (4.4-14)	4.8 (3.3-10)	3.7 (2.5-8.1)	2.9 (1.9-6.3)	2.2 (1.5-4.9)	1.7 (1.1-3.7)	1.3 (0.9-2.9)	1.0 (0.7-2.2)	0.8 (0.5-1.7)
2	19 (11-34)	15 (8.3-27)	11 (6.2-21)	8.6 (4.6-16)	6.7 (3.6-13)	5.2 (2.8-10)	4.1 (2.1-8.0)	3.1 (1.6-6.2)	2.4 (1.2-4.8)	1.9 (0.9-3.7)	1.4 (0.7-2.9)
3	29 (16-45)	23 (12-37)	18 (9.1-30)	14 (6.9-24)	11 (5.4-19)	9.0 (4.2-15)	7.1 (3.2-12)	5.5 (2.5-9.3)	4.3 (1.9-7.2)	3.3 (1.4-5.6)	2.5 (1.1-4.3)
4	42 (22-54)	35 (17-46)	28 (13-38)	23 (10-32)	19 (8.1-26)	15 (6.3-21)	12 (4.9-17)	9.3 (3.8-14)	7.2 (2.9-11)	5.6 (2.2-8.4)	4.4 (1.7-6.5)
5	56 (32-62)	48 (26-55)	41 (20-48)	34 (16-40)	28 (13-34)	23 (10-28)	19 (7.9-23)	15 (6.1-18)	12 (4.8-15)	9.3 (3.7-12)	7.3 (2.9-9.1)
6	68	62	55	48	41	35	29	23	19	15	12