

The US (Asian) - 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 (Asian). 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	8.5	4.5	2.4	1.3	0.7	0.3	0.2	0.1	0.1	0.0	0.0
1	13 (8.9-17)	7.2 (4.7-9.4)	3.8 (2.5-5.0)	2.0 (1.3-2.7)	1.1 (0.7-1.4)	0.6 (0.4-0.7)	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	20 (12-30)	11 (6.7-17)	6.1 (3.5-9.2)	3.2 (1.9-4.9)	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)
3	30 (18-45)	17 (10-27)	9.5 (5.4-15)	5.1 (2.8-8.3)	2.7 (1.5-4.4)	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)
4	43 (29-59)	26 (17-38)	14 (9.1-22)	7.9 (4.8-12)	4.2 (2.6-6.7)	2.2 (1.3-3.5)	1.2 (0.7-1.9)	0.6 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	57 (47-71)	37 (29-49)	22 (16-30)	12 (8.8-17)	6.5 (4.7-9.4)	3.4 (2.5-5.0)	1.8 (1.3-2.7)	1.0 (0.7-1.4)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
6	73	51	31	18	9.8	5.3	2.8	1.5	0.8	0.4	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 (Asian).

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	8.9	4.9	2.7	1.5	0.8	0.4	0.2	0.1	0.1	0.0	0.0
1	14 (9.4-17)	7.7 (5.2-9.5)	4.3 (2.9-5.3)	2.3 (1.6-2.9)	1.3 (0.9-1.6)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	21 (13-29)	12 (7.3-17)	6.7 (4.0-9.6)	3.7 (2.2-5.3)	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 (0.1-0.2)	0.1 (0.0-0.1)
3	30 (19-43)	18 (11-27)	10 (6.1-16)	5.7 (3.4-8.9)	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 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
4	42 (30-57)	26 (18-38)	15 (10-23)	8.7 (5.7-13)	4.8 (3.1-7.5)	2.7 (1.7-4.1)	1.4 (0.9-2.3)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
5	56 (48-69)	37 (30-49)	22 (18-31)	13 (10-18)	7.3 (5.7-10)	4.1 (3.1-5.8)	2.2 (1.7-3.2)	1.2 (0.9-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
6	71	50	32	19	11	6.1	3.4	1.8	1.0	0.6	0.3

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	8.6	5.1	2.9	1.7	1.0	0.6	0.3	0.2	0.1	0.1	0.0
1	13 (9.0-15)	7.7 (5.3-9.1)	4.5 (3.1-5.3)	2.7 (1.8-3.1)	1.5 (1.0-1.8)	0.9 (0.6-1.1)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	19 (13-26)	12 (7.5-16)	6.9 (4.4-9.5)	4.1 (2.5-5.6)	2.4 (1.5-3.3)	1.4 (0.9-1.9)	0.8 (0.5-1.1)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	28 (18-38)	17 (11-25)	10 (6.6-15)	6.2 (3.9-9.2)	3.6 (2.2-5.4)	2.1 (1.3-3.2)	1.2 (0.8-1.9)	0.7 (0.4-1.1)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
4	38 (29-51)	25 (18-35)	15 (11-22)	9.2 (6.5-14)	5.5 (3.8-8.2)	3.2 (2.2-4.8)	1.9 (1.3-2.8)	1.1 (0.7-1.6)	0.6 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
5	51 (45-63)	35 (30-45)	22 (19-30)	14 (11-19)	8.1 (6.8-11)	4.8 (4.0-6.8)	2.8 (2.3-4.0)	1.6 (1.3-2.3)	1.0 (0.8-1.4)	0.6 (0.5-0.8)	0.4 (0.3-0.5)
6	64	47	31	20	12	7.1	4.2	2.4	1.5	0.9	0.5

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

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	8.5	5.3	3.3	2.0	1.2	0.8	0.5	0.3	0.2	0.1	0.1
1	13 (9.0-15)	8.0 (5.6-9.4)	5.0 (3.5-5.9)	3.1 (2.1-3.6)	1.9 (1.3-2.2)	1.2 (0.8-1.4)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	18 (12-23)	12 (7.8-15)	7.4 (4.9-9.6)	4.6 (3.0-6.0)	2.9 (1.9-3.7)	1.8 (1.1-2.3)	1.1 (0.7-1.4)	0.7 (0.4-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	26 (18-34)	17 (12-23)	11 (7.4-15)	6.9 (4.6-9.7)	4.3 (2.8-6.1)	2.6 (1.7-3.8)	1.6 (1.1-2.3)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
4	35 (28-46)	24 (18-33)	16 (12-22)	10 (7.5-14)	6.3 (4.7-9.1)	3.9 (2.9-5.7)	2.4 (1.8-3.5)	1.5 (1.1-2.2)	1.0 (0.7-1.4)	0.6 (0.4-0.9)	0.4 (0.3-0.6)
5	47 (42-57)	33 (29-42)	22 (19-29)	14 (12-20)	9.2 (7.7-13)	5.8 (4.8-8.0)	3.6 (3.0-5.0)	2.2 (1.8-3.1)	1.4 (1.2-2.0)	0.9 (0.7-1.3)	0.6 (0.5-0.8)
6	59	44	31	20	13	8.4	5.3	3.3	2.1	1.3	0.9

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	9.0	6.0	3.9	2.6	1.7	1.1	0.7	0.5	0.3	0.2	0.1
1	14 (13-18)	9.7 (8.4-12)	6.4 (5.5-8.2)	4.2 (3.6-5.4)	2.8 (2.4-3.5)	1.8 (1.5-2.3)	1.2 (1.0-1.5)	0.8 (0.7-1.0)	0.5 (0.4-0.7)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
2	22 (18-29)	15 (12-20)	10 (8.3-14)	6.9 (5.5-9.3)	4.6 (3.6-6.2)	3.0 (2.3-4.1)	2.0 (1.5-2.7)	1.3 (1.0-1.8)	0.9 (0.7-1.2)	0.6 (0.5-0.8)	0.4 (0.3-0.5)
3	33 (27-40)	24 (18-29)	16 (13-21)	11 (8.3-14)	7.4 (5.5-9.6)	4.9 (3.6-6.4)	3.2 (2.4-4.2)	2.1 (1.6-2.8)	1.4 (1.0-1.9)	1.0 (0.7-1.3)	0.7 (0.5-0.9)
4	47 (38-53)	35 (27-40)	25 (19-30)	17 (13-21)	12 (8.7-14)	7.9 (5.8-9.7)	5.2 (3.8-6.4)	3.5 (2.5-4.3)	2.4 (1.7-3.0)	1.6 (1.2-2.0)	1.1 (0.8-1.3)
5	61 (52-64)	49 (41-52)	37 (30-40)	26 (21-30)	18 (14-21)	13 (9.8-14)	8.4 (6.5-9.6)	5.7 (4.4-6.5)	3.9 (3.0-4.5)	2.6 (2.0-3.0)	1.8 (1.4-2.0)
6	72	62	50	38	28	20	13	9.1	6.3	4.3	2.9

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

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	9.9	6.9	4.8	3.4	2.3	1.6	1.1	0.8	0.5	0.4	0.3
1	18 (14-35)	13 (9.7-26)	9.2 (6.8-19)	6.5 (4.7-14)	4.5 (3.3-9.6)	3.1 (2.3-6.7)	2.2 (1.6-4.7)	1.5 (1.1-3.3)	1.1 (0.8-2.4)	0.8 (0.6-1.7)	0.6 (0.4-1.2)
2	29 (19-49)	22 (13-39)	16 (9.5-30)	12 (6.7-22)	8.3 (4.6-16)	5.8 (3.2-11)	4.1 (2.2-7.9)	2.9 (1.6-5.7)	2.1 (1.1-4.1)	1.5 (0.8-2.9)	1.0 (0.6-2.1)
3	43 (27-61)	34 (20-50)	26 (14-40)	20 (10-31)	14 (7.0-23)	10 (4.8-17)	7.2 (3.3-12)	5.2 (2.4-8.7)	3.7 (1.7-6.3)	2.7 (1.2-4.5)	1.9 (0.8-3.3)
4	58 (37-69)	49 (28-60)	40 (21-50)	31 (15-41)	23 (11-32)	17 (7.5-24)	12 (5.2-17)	9.0 (3.8-13)	6.5 (2.7-9.4)	4.7 (1.9-6.8)	3.4 (1.4-4.9)
5	70 (49-76)	63 (40-69)	54 (31-60)	45 (23-50)	36 (17-41)	27 (12-31)	20 (8.6-24)	15 (6.3-18)	11 (4.5-13)	8.0 (3.2-9.6)	5.8 (2.3-6.9)
6	79	74	68	60	50	40	31	24	18	13	9.7

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	7.6	5.6	4.1	3.0	2.2	1.6	1.2	0.9	0.7	0.5
1	18 (13-36)	14 (9.8-28)	10 (7.3-22)	7.7 (5.3-16)	5.7 (3.9-12)	4.2 (2.8-9.0)	3.1 (2.1-6.7)	2.3 (1.6-5.0)	1.7 (1.2-3.8)	1.3 (0.9-2.8)	1.0 (0.6-2.1)
2	29 (18-48)	23 (14-40)	18 (10-32)	13 (7.5-25)	10 (5.5-19)	7.5 (4.0-15)	5.6 (2.9-11)	4.2 (2.2-8.4)	3.2 (1.6-6.4)	2.4 (1.2-4.8)	1.8 (0.9-3.6)
3	42 (25-59)	35 (19-51)	28 (15-43)	22 (11-35)	17 (8.2-27)	13 (6.0-21)	9.6 (4.4-16)	7.4 (3.3-12)	5.6 (2.5-9.5)	4.3 (1.9-7.2)	3.2 (1.4-5.5)
4	55 (35-67)	48 (27-60)	40 (21-52)	33 (16-44)	26 (12-36)	21 (9.1-29)	16 (6.8-23)	12 (5.1-18)	9.5 (3.9-14)	7.2 (2.9-11)	5.5 (2.2-8.2)
5	67 (45-73)	61 (38-67)	54 (30-60)	46 (24-53)	38 (19-45)	31 (14-37)	25 (11-30)	20 (8.3-24)	15 (6.3-19)	12 (4.8-15)	9.1 (3.6-11)
6	76	72	66	60	52	44	36	30	24	19	15

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

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	8.6	6.6	5.1	3.9	3.0	2.3	1.8	1.4	1.1	0.9	0.7
1	15 (11-31)	12 (8.6-25)	9.5 (6.7-20)	7.4 (5.1-16)	5.7 (3.9-12)	4.4 (3.0-9.6)	3.4 (2.3-7.5)	2.7 (1.8-5.9)	2.1 (1.4-4.7)	1.7 (1.1-3.7)	1.3 (0.9-2.9)
2	25 (15-43)	20 (12-36)	16 (9.3-30)	13 (7.2-24)	10 (5.5-19)	7.9 (4.3-15)	6.2 (3.3-12)	5.0 (2.6-9.7)	3.9 (2.0-7.8)	3.1 (1.6-6.2)	2.5 (1.3-4.9)
3	37 (21-54)	31 (17-47)	26 (13-40)	21 (11-33)	17 (8.2-27)	13 (6.4-22)	11 (5.0-18)	8.5 (3.9-14)	6.8 (3.1-12)	5.4 (2.4-9.2)	4.3 (1.9-7.3)
4	50 (30-63)	44 (24-56)	38 (19-49)	32 (15-42)	26 (12-35)	21 (9.5-29)	17 (7.5-24)	14 (6.0-20)	11 (4.7-16)	9.2 (3.7-13)	7.3 (3.0-11)
5	63 (40-69)	57 (34-64)	51 (28-58)	45 (23-51)	38 (18-44)	32 (15-38)	27 (12-32)	22 (9.4-27)	18 (7.6-22)	15 (6.1-18)	12 (4.8-15)
6	73	69	64	58	52	45	39	33	28	23	19

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	5.6	4.5	3.6	2.9	2.3	1.9	1.5	1.3	1.1	0.9	0.7
1	10 (7.2-21)	8.3 (5.9-18)	6.8 (4.7-15)	5.5 (3.8-12)	4.5 (3.1-9.7)	3.6 (2.5-7.9)	3.0 (2.0-6.5)	2.5 (1.7-5.4)	2.0 (1.4-4.5)	1.7 (1.1-3.7)	1.4 (0.9-3.1)
2	17 (10-30)	14 (8.2-26)	12 (6.6-22)	9.7 (5.4-18)	7.9 (4.3-15)	6.4 (3.5-12)	5.3 (2.9-10)	4.5 (2.4-8.7)	3.7 (2.0-7.3)	3.1 (1.6-6.1)	2.5 (1.3-5.0)
3	27 (14-41)	23 (12-35)	19 (9.5-30)	16 (7.7-26)	13 (6.3-22)	11 (5.1-18)	9.1 (4.2-15)	7.6 (3.5-13)	6.4 (2.9-11)	5.3 (2.4-9.0)	4.5 (2.0-7.6)
4	38 (20-50)	33 (17-44)	29 (14-39)	25 (11-34)	21 (9.4-29)	17 (7.6-24)	15 (6.3-21)	13 (5.3-18)	11 (4.4-15)	8.9 (3.7-13)	7.5 (3.0-11)
5	51 (28-57)	46 (24-52)	41 (20-47)	36 (17-42)	31 (14-36)	26 (12-31)	23 (9.8-27)	20 (8.3-24)	17 (6.9-20)	14 (5.8-17)	12 (4.9-15)
6	64	59	54	49	43	38	34	29	26	22	19