

The US (Asian) - 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 (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	6.0	3.1	1.6	0.8	0.4	0.2	0.1	0.1	0.0	0.0	0.0	
1	9.5 (6.3-12)	5.0 (3.2-6.5)	2.6 (1.7-3.3)	1.3 (0.9-1.7)	0.7 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (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	15 (8.8-22)	7.9 (4.6-12)	4.1 (2.4-6.2)	2.1 (1.2-3.2)	1.1 (0.6-1.6)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	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	22 (13-35)	12 (6.9-20)	6.4 (3.6-11)	3.3 (1.8-5.5)	1.7 (0.9-2.9)	0.9 (0.5-1.5)	0.4 (0.2-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	
4	33 (22-48)	19 (12-28)	10 (6.1-16)	5.2 (3.2-8.3)	2.7 (1.6-4.3)	1.4 (0.8-2.2)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	
5	46 (37-60)	27 (21-38)	15 (11-22)	8.0 (5.9-12)	4.2 (3.0-6.1)	2.1 (1.6-3.1)	1.1 (0.8-1.6)	0.6 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	
6	62	39	22	12	6.4	3.3	1.7	0.9	0.5	0.3	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 (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	6.2	3.4	1.8	1.0	0.5	0.3	0.2	0.1	0.1	0.0	0.0
1	9.8 (6.6-12)	5.4 (3.6-6.6)	2.9 (1.9-3.6)	1.6 (1.0-1.9)	0.8 (0.6-1.0)	0.5 (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)	0.0 (0.0-0.0)
2	15 (9.2-21)	8.4 (5.0-12)	4.6 (2.7-6.6)	2.5 (1.5-3.6)	1.3 (0.8-2.0)	0.7 (0.4-1.1)	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)
3	22 (14-34)	13 (7.6-20)	7.1 (4.1-11)	3.9 (2.2-6.2)	2.1 (1.2-3.4)	1.1 (0.7-1.8)	0.6 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	33 (23-47)	19 (13-29)	11 (7.1-17)	6.0 (3.9-9.3)	3.2 (2.1-5.1)	1.8 (1.1-2.8)	0.9 (0.6-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
5	45 (38-59)	28 (23-38)	16 (13-23)	9.1 (7.1-13)	5.0 (3.9-7.2)	2.7 (2.1-3.9)	1.5 (1.1-2.1)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
6	61	40	24	14	7.5	4.1	2.2	1.2	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	6.9	3.9	2.2	1.2	0.7	0.4	0.2	0.1	0.1	0.0	0.0
1	11 (7.2-13)	6.0 (4.1-7.2)	3.4 (2.3-4.1)	1.9 (1.3-2.3)	1.1 (0.7-1.3)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	16 (10-22)	9.3 (5.8-13)	5.3 (3.3-7.3)	3.0 (1.8-4.1)	1.7 (1.0-2.3)	0.9 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
3	23 (15-34)	14 (8.7-21)	8.0 (4.9-12)	4.6 (2.8-7.0)	2.6 (1.6-4.0)	1.4 (0.9-2.2)	0.8 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
4	34 (25-47)	21 (15-30)	12 (8.4-18)	6.9 (4.7-10)	3.9 (2.7-6.0)	2.2 (1.5-3.4)	1.2 (0.8-1.9)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
5	46 (40-59)	29 (25-40)	18 (15-25)	10 (8.5-15)	5.9 (4.8-8.4)	3.3 (2.7-4.8)	1.9 (1.5-2.7)	1.1 (0.9-1.6)	0.6 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
6	61	41	26	15	8.8	5.0	2.9	1.7	1.0	0.6	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 (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	7.9	4.6	2.7	1.6	0.9	0.5	0.3	0.2	0.1	0.1	0.0
1	12 (8.2-14)	7.0 (4.9-8.4)	4.1 (2.8-5.0)	2.4 (1.7-2.9)	1.4 (1.0-1.7)	0.8 (0.6-1.0)	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 (0.0-0.1)
2	17 (12-23)	11 (6.8-14)	6.3 (4.0-8.4)	3.7 (2.3-4.9)	2.1 (1.4-2.9)	1.2 (0.8-1.7)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	25 (17-35)	16 (10-22)	9.4 (6.1-14)	5.5 (3.6-8.1)	3.2 (2.1-4.8)	1.9 (1.2-2.8)	1.1 (0.7-1.7)	0.7 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
4	35 (27-48)	23 (17-32)	14 (10-20)	8.3 (5.9-12)	4.9 (3.4-7.2)	2.9 (2.0-4.3)	1.7 (1.2-2.6)	1.0 (0.7-1.6)	0.6 (0.4-0.9)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
5	48 (41-60)	32 (27-42)	20 (16-27)	12 (9.9-17)	7.2 (5.9-10)	4.3 (3.4-6.0)	2.6 (2.1-3.6)	1.6 (1.3-2.2)	0.9 (0.8-1.3)	0.6 (0.5-0.8)	0.3 (0.3-0.5)
6	62	43	28	18	11	6.3	3.8	2.3	1.4	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	9.5	5.9	3.6	2.2	1.3	0.8	0.5	0.3	0.2	0.1	0.1
1	16 (13-19)	9.7 (8.2-12)	6.0 (5.1-7.5)	3.7 (3.1-4.6)	2.2 (1.9-2.8)	1.4 (1.1-1.7)	0.9 (0.7-1.1)	0.5 (0.5-0.7)	0.3 (0.3-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
2	25 (20-32)	16 (12-21)	9.9 (7.6-13)	6.1 (4.7-8.3)	3.7 (2.8-5.1)	2.3 (1.7-3.2)	1.4 (1.1-2.0)	0.9 (0.7-1.3)	0.6 (0.4-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
3	38 (28-47)	25 (18-33)	16 (12-21)	10 (7.1-14)	6.2 (4.4-8.5)	3.8 (2.7-5.3)	2.4 (1.7-3.4)	1.5 (1.1-2.1)	1.0 (0.7-1.3)	0.6 (0.4-0.8)	0.4 (0.3-0.5)
4	54 (43-62)	38 (29-45)	25 (19-31)	16 (12-20)	10 (7.3-13)	6.4 (4.5-8.1)	4.0 (2.9-5.2)	2.6 (1.8-3.3)	1.6 (1.1-2.1)	1.0 (0.7-1.3)	0.6 (0.5-0.8)
5	70 (62-75)	54 (46-59)	38 (31-43)	25 (20-29)	16 (13-19)	10 (8.2-12)	6.7 (5.2-7.8)	4.2 (3.3-5.0)	2.7 (2.1-3.1)	1.7 (1.3-2.0)	1.1 (0.8-1.2)
6	84	71	54	38	26	17	11	7.0	4.4	2.8	1.8

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	12	7.7	4.9	3.1	2.0	1.3	0.8	0.6	0.4	0.2	0.2
1	22 (16-42)	15 (11-29)	9.6 (6.9-20)	6.2 (4.4-13)	4.0 (2.8-8.4)	2.6 (1.8-5.5)	1.7 (1.2-3.7)	1.1 (0.8-2.4)	0.7 (0.5-1.6)	0.5 (0.3-1.0)	0.3 (0.2-0.7)
2	36 (23-61)	26 (15-46)	17 (9.7-33)	12 (6.2-22)	7.5 (4.0-15)	5.0 (2.6-9.9)	3.3 (1.7-6.6)	2.2 (1.1-4.4)	1.4 (0.7-2.9)	0.9 (0.5-1.9)	0.6 (0.3-1.2)
3	54 (32-74)	41 (22-61)	29 (14-47)	20 (9.4-34)	13 (6.0-23)	9.0 (4.0-16)	6.0 (2.6-11)	4.0 (1.7-7.2)	2.7 (1.1-4.8)	1.7 (0.7-3.2)	1.1 (0.5-2.1)
4	71 (47-83)	59 (33-74)	45 (23-60)	33 (15-46)	23 (9.9-33)	16 (6.6-23)	11 (4.4-16)	7.2 (2.9-11)	4.8 (1.9-7.2)	3.1 (1.2-4.8)	2.1 (0.8-3.2)
5	84 (65-88)	76 (50-82)	64 (37-71)	50 (25-57)	36 (17-43)	26 (12-31)	18 (7.8-22)	12 (5.2-15)	8.3 (3.4-10)	5.5 (2.3-6.8)	3.7 (1.5-4.5)
6	90	87	80	68	54	41	29	21	14	9.5	6.3

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	14	9.3	6.2	4.2	2.8	1.9	1.3	0.9	0.6	0.4	0.3
1	24 (18-46)	17 (12-34)	12 (8.1-24)	8.1 (5.4-17)	5.5 (3.7-12)	3.8 (2.5-8.1)	2.6 (1.7-5.7)	1.8 (1.2-3.9)	1.3 (0.8-2.7)	0.9 (0.6-1.9)	0.6 (0.4-1.3)
2	39 (24-64)	29 (17-51)	21 (11-39)	15 (7.6-28)	10 (5.2-20)	7.1 (3.6-14)	5.0 (2.5-10)	3.4 (1.7-7.0)	2.4 (1.2-4.9)	1.6 (0.8-3.4)	1.1 (0.5-2.3)
3	56 (34-76)	44 (24-65)	34 (17-53)	24 (11-40)	17 (7.8-30)	13 (5.4-22)	8.9 (3.7-16)	6.2 (2.6-11)	4.3 (1.8-7.9)	3.0 (1.2-5.5)	2.1 (0.8-3.8)
4	71 (48-83)	61 (36-76)	50 (26-66)	38 (18-53)	28 (13-41)	21 (8.8-31)	15 (6.2-23)	11 (4.3-17)	7.5 (3.0-12)	5.3 (2.0-8.3)	3.6 (1.4-5.8)
5	83 (64-87)	76 (52-82)	67 (40-75)	55 (29-64)	43 (21-52)	33 (15-41)	25 (11-31)	18 (7.5-23)	13 (5.3-16)	9.0 (3.6-12)	6.3 (2.5-8.1)
6	89	86	81	72	61	49	38	29	21	15	11

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	12	8.8	6.2	4.3	3.1	2.2	1.6	1.2	0.8	0.6	0.4
1	22 (16-43)	16 (11-32)	12 (8.0-24)	8.3 (5.6-17)	6.1 (4.1-13)	4.4 (2.9-9.4)	3.2 (2.1-6.9)	2.3 (1.5-5.0)	1.7 (1.1-3.6)	1.2 (0.8-2.6)	0.9 (0.6-1.9)
2	36 (22-60)	27 (16-49)	20 (11-38)	15 (7.9-28)	11 (5.7-22)	8.2 (4.2-16)	6.0 (3.0-12)	4.4 (2.2-8.8)	3.2 (1.6-6.4)	2.3 (1.1-4.7)	1.7 (0.8-3.4)
3	52 (31-72)	42 (23-62)	33 (17-51)	25 (12-41)	19 (8.6-32)	14 (6.3-25)	11 (4.6-19)	7.8 (3.3-14)	5.7 (2.4-10)	4.1 (1.7-7.5)	3.0 (1.2-5.5)
4	68 (44-80)	59 (34-73)	48 (25-64)	39 (18-53)	30 (14-43)	23 (10-34)	18 (7.4-27)	13 (5.4-20)	9.9 (3.9-15)	7.2 (2.8-11)	5.3 (2.1-8.3)
5	80 (60-85)	74 (49-80)	65 (39-73)	55 (29-64)	45 (22-54)	36 (17-44)	28 (13-35)	22 (9.4-27)	16 (6.9-21)	12 (5.0-16)	9.0 (3.6-12)
6	87	84	79	72	63	53	43	34	26	20	15

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	8.9	6.6	4.9	3.6	2.8	2.1	1.6	1.2	0.9	0.7	0.5
1	16 (12-33)	12 (8.6-25)	9.3 (6.4-19)	7.0 (4.7-15)	5.4 (3.6-11)	4.1 (2.8-8.8)	3.1 (2.1-6.8)	2.4 (1.6-5.2)	1.8 (1.2-3.9)	1.4 (0.9-3.0)	1.0 (0.7-2.3)
2	27 (16-48)	21 (12-39)	16 (8.9-31)	13 (6.7-24)	9.8 (5.1-19)	7.6 (3.9-15)	5.8 (3.0-12)	4.5 (2.3-9.0)	3.4 (1.7-6.9)	2.6 (1.3-5.3)	2.0 (1.0-4.0)
3	41 (23-60)	34 (18-51)	27 (13-42)	21 (10-34)	17 (7.7-28)	13 (5.9-22)	10 (4.5-18)	7.9 (3.4-14)	6.1 (2.6-11)	4.7 (2.0-8.3)	3.6 (1.5-6.4)
4	57 (33-70)	49 (26-63)	40 (20-54)	33 (15-46)	27 (12-38)	22 (9.3-31)	17 (7.2-25)	13 (5.5-20)	10 (4.2-16)	8.1 (3.2-12)	6.2 (2.4-9.6)
5	71 (47-77)	64 (39-72)	56 (31-64)	48 (24-56)	40 (19-48)	33 (15-41)	27 (12-33)	22 (9.3-27)	17 (7.2-22)	14 (5.6-17)	10 (4.3-13)
6	82	77	71	64	57	49	41	34	27	22	17