

Brazil - 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 Brazil. 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	8.4	4.4	2.3	1.2	0.6	0.3	0.2	0.1	0.0	0.0	0.0
1	13 (8.8-17)	7.0 (4.6-9.1)	3.6 (2.4-4.7)	1.9 (1.2-2.4)	1.0 (0.6-1.3)	0.5 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	20 (12-30)	11 (6.5-16)	5.8 (3.3-8.7)	3.0 (1.7-4.5)	1.5 (0.9-2.3)	0.8 (0.5-1.2)	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)
3	30 (18-45)	17 (9.7-27)	9.0 (5.1-15)	4.7 (2.6-7.7)	2.4 (1.3-4.0)	1.2 (0.7-2.1)	0.6 (0.4-1.1)	0.3 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.0 (0.0-0.1)
4	43 (29-60)	25 (16-37)	14 (8.6-21)	7.3 (4.5-12)	3.8 (2.3-6.1)	2.0 (1.2-3.1)	1.0 (0.6-1.6)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
5	58 (47-72)	36 (28-49)	21 (15-29)	11 (8.2-16)	5.9 (4.3-8.5)	3.0 (2.2-4.4)	1.6 (1.1-2.3)	0.8 (0.6-1.2)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
6	74	50	30	17	8.9	4.7	2.4	1.3	0.7	0.4	0.2

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

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	7.4	4.0	2.2	1.2	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	11 (7.8-14)	6.3 (4.2-7.8)	3.5 (2.3-4.3)	1.9 (1.2-2.3)	1.0 (0.7-1.2)	0.5 (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	17 (11-25)	9.8 (6.0-14)	5.4 (3.3-7.8)	2.9 (1.8-4.3)	1.6 (0.9-2.3)	0.9 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	26 (16-38)	15 (9.0-23)	8.3 (4.9-13)	4.6 (2.7-7.2)	2.5 (1.4-3.9)	1.3 (0.8-2.1)	0.7 (0.4-1.2)	0.4 (0.2-0.6)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	37 (26-51)	22 (15-32)	13 (8.3-19)	7.0 (4.6-11)	3.8 (2.5-6.0)	2.1 (1.3-3.2)	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)
5	50 (42-64)	32 (26-43)	19 (15-26)	11 (8.3-15)	5.8 (4.6-8.4)	3.2 (2.5-4.6)	1.7 (1.3-2.5)	1.0 (0.7-1.4)	0.5 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
6	65	44	27	16	8.8	4.8	2.6	1.5	0.8	0.5	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	7.9	4.5	2.5	1.4	0.8	0.4	0.3	0.1	0.1	0.1	0.0
1	12 (8.3-14)	6.9 (4.7-8.2)	3.9 (2.7-4.7)	2.2 (1.5-2.6)	1.2 (0.8-1.5)	0.7 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
2	18 (12-24)	11 (6.7-14)	6.0 (3.8-8.3)	3.4 (2.1-4.7)	1.9 (1.2-2.7)	1.1 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	26 (17-37)	16 (10-23)	9.1 (5.7-14)	5.2 (3.2-7.9)	2.9 (1.8-4.5)	1.7 (1.0-2.5)	0.9 (0.6-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	37 (27-50)	23 (16-33)	14 (9.5-20)	7.9 (5.4-12)	4.5 (3.1-6.8)	2.5 (1.7-3.8)	1.4 (1.0-2.2)	0.8 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
5	49 (44-62)	32 (28-43)	20 (17-27)	12 (9.7-16)	6.7 (5.5-9.5)	3.8 (3.1-5.4)	2.2 (1.8-3.1)	1.3 (1.0-1.8)	0.7 (0.6-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
6	63	44	28	17	9.9	5.7	3.3	1.9	1.1	0.6	0.4

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

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	9.0	5.3	3.1	1.8	1.1	0.6	0.4	0.2	0.1	0.1	0.1
1	13 (9.4-16)	8.0 (5.6-9.5)	4.7 (3.3-5.6)	2.8 (1.9-3.3)	1.6 (1.1-1.9)	0.9 (0.7-1.1)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
2	19 (13-25)	12 (7.9-15)	7.1 (4.6-9.3)	4.2 (2.7-5.5)	2.5 (1.6-3.2)	1.4 (0.9-1.9)	0.9 (0.6-1.1)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	28 (19-37)	17 (12-24)	11 (7.0-15)	6.3 (4.1-9.0)	3.7 (2.4-5.4)	2.2 (1.4-3.2)	1.3 (0.8-1.9)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
4	38 (30-50)	25 (19-34)	15 (11-22)	9.3 (6.8-13)	5.5 (4.0-8.1)	3.2 (2.3-4.8)	2.0 (1.4-2.9)	1.2 (0.9-1.8)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
5	50 (44-61)	34 (29-44)	22 (18-29)	13 (11-18)	8.1 (6.7-11)	4.8 (3.9-6.7)	2.9 (2.4-4.1)	1.8 (1.4-2.5)	1.1 (0.9-1.5)	0.6 (0.5-0.9)	0.4 (0.3-0.6)
6	63	46	30	19	12	7.0	4.3	2.6	1.6	1.0	0.6

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	11	6.5	4.0	2.4	1.5	0.9	0.6	0.4	0.2	0.1	0.1
1	17 (15-21)	11 (9.1-13)	6.6 (5.6-8.4)	4.1 (3.5-5.2)	2.5 (2.1-3.2)	1.5 (1.3-2.0)	1.0 (0.8-1.2)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.2 (0.1-0.2)
2	26 (21-34)	17 (14-23)	11 (8.5-14)	6.7 (5.2-9.1)	4.1 (3.2-5.6)	2.6 (2.0-3.5)	1.6 (1.2-2.2)	1.0 (0.8-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
3	39 (31-47)	26 (20-33)	17 (13-22)	11 (8.0-14)	6.8 (4.9-9.0)	4.2 (3.0-5.7)	2.7 (1.9-3.6)	1.7 (1.2-2.3)	1.1 (0.8-1.5)	0.7 (0.5-0.9)	0.4 (0.3-0.6)
4	54 (44-60)	39 (30-45)	27 (20-32)	17 (13-21)	11 (8.0-14)	6.9 (5.0-8.6)	4.4 (3.2-5.6)	2.8 (2.0-3.5)	1.8 (1.3-2.3)	1.1 (0.8-1.4)	0.7 (0.5-0.9)
5	68 (60-72)	54 (46-58)	39 (32-43)	27 (21-30)	17 (14-20)	11 (8.7-13)	7.2 (5.6-8.3)	4.6 (3.6-5.4)	2.9 (2.3-3.4)	1.9 (1.4-2.2)	1.2 (0.9-1.4)
6	79	68	54	39	27	18	12	7.5	4.8	3.1	1.9

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

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	13	8.2	5.3	3.4	2.2	1.4	0.9	0.6	0.4	0.3	0.2
1	23 (17-43)	15 (11-30)	10 (7.4-21)	6.7 (4.8-14)	4.3 (3.1-9.1)	2.8 (2.0-6.1)	1.9 (1.3-4.0)	1.2 (0.9-2.7)	0.8 (0.6-1.8)	0.5 (0.4-1.2)	0.4 (0.3-0.8)
2	36 (24-58)	26 (16-45)	18 (10-33)	12 (6.8-23)	8.0 (4.4-15)	5.3 (2.9-10)	3.6 (1.9-7.0)	2.4 (1.3-4.7)	1.6 (0.8-3.1)	1.0 (0.5-2.1)	0.7 (0.4-1.4)
3	52 (33-70)	40 (23-58)	29 (15-44)	21 (10-32)	14 (6.6-23)	9.5 (4.4-16)	6.4 (2.9-11)	4.3 (1.9-7.4)	2.9 (1.3-5.0)	1.9 (0.8-3.3)	1.3 (0.5-2.2)
4	66 (45-77)	56 (33-68)	44 (23-56)	33 (16-44)	23 (10-32)	16 (6.9-23)	11 (4.6-16)	7.6 (3.1-11)	5.1 (2.1-7.5)	3.4 (1.4-5.0)	2.3 (0.9-3.4)
5	78 (59-83)	70 (47-76)	60 (35-66)	48 (25-54)	36 (17-41)	26 (12-31)	18 (7.9-22)	13 (5.3-15)	8.7 (3.6-10)	5.9 (2.4-7.1)	3.9 (1.6-4.8)
6	85	81	74	64	51	40	29	21	15	9.9	6.7

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	13	9.3	6.3	4.3	2.9	2.0	1.4	1.0	0.7	0.5	0.3
1	23 (17-44)	17 (12-33)	12 (8.2-24)	8.1 (5.6-17)	5.6 (3.8-12)	3.9 (2.6-8.5)	2.7 (1.8-5.9)	1.9 (1.3-4.2)	1.3 (0.9-2.9)	0.9 (0.6-2.0)	0.6 (0.4-1.4)
2	36 (23-58)	27 (17-47)	20 (11-36)	14 (7.8-27)	10 (5.3-19)	7.1 (3.7-14)	5.0 (2.6-10)	3.5 (1.8-7.1)	2.5 (1.3-5.0)	1.7 (0.9-3.5)	1.2 (0.6-2.4)
3	50 (32-68)	40 (24-59)	31 (17-48)	23 (12-37)	17 (8.0-27)	12 (5.6-20)	8.8 (3.9-15)	6.2 (2.7-11)	4.4 (1.9-7.6)	3.1 (1.3-5.4)	2.1 (0.9-3.8)
4	63 (43-75)	55 (33-67)	45 (24-58)	35 (17-47)	27 (12-37)	20 (8.7-28)	15 (6.1-21)	11 (4.3-16)	7.5 (3.0-11)	5.3 (2.1-8.0)	3.7 (1.5-5.7)
5	74 (55-79)	67 (45-73)	59 (35-66)	49 (26-56)	39 (19-46)	31 (14-37)	23 (10-28)	17 (7.2-21)	12 (5.1-16)	8.9 (3.6-11)	6.3 (2.5-8.0)
6	82	77	71	63	54	44	35	27	20	14	10

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

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	8.9	6.3	4.5	3.3	2.4	1.8	1.3	0.9	0.7	0.5
1	21 (16-40)	16 (11-32)	12 (8.3-24)	8.5 (5.9-18)	6.3 (4.3-13)	4.7 (3.2-10)	3.4 (2.3-7.5)	2.5 (1.7-5.5)	1.8 (1.2-4.0)	1.3 (0.9-3.0)	1.0 (0.7-2.2)
2	33 (21-52)	26 (16-43)	20 (11-35)	15 (8.2-27)	11 (6.1-21)	8.3 (4.5-16)	6.2 (3.3-12)	4.6 (2.4-9.0)	3.4 (1.8-6.7)	2.5 (1.3-5.0)	1.8 (0.9-3.7)
3	46 (29-63)	38 (22-55)	30 (16-46)	23 (12-37)	18 (8.9-29)	14 (6.7-23)	11 (5.0-18)	8.0 (3.6-13)	5.9 (2.7-10)	4.4 (2.0-7.5)	3.2 (1.4-5.5)
4	59 (39-71)	51 (30-64)	43 (23-55)	35 (17-46)	28 (13-38)	22 (9.9-31)	17 (7.4-24)	13 (5.5-19)	9.9 (4.1-14)	7.4 (3.0-11)	5.5 (2.2-8.2)
5	70 (49-76)	64 (41-70)	56 (33-63)	48 (25-55)	40 (20-47)	33 (15-39)	26 (12-32)	21 (8.8-25)	16 (6.6-20)	12 (4.9-15)	9.1 (3.6-11)
6	79	74	69	61	54	46	38	31	25	19	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	9.6	7.3	5.5	4.2	3.3	2.5	2.0	1.5	1.2	0.9	0.7
1	17 (12-33)	13 (9.5-27)	10 (7.2-21)	7.8 (5.5-17)	6.1 (4.3-13)	4.8 (3.3-10)	3.8 (2.6-8.2)	2.9 (2.0-6.4)	2.3 (1.5-5.0)	1.8 (1.2-3.9)	1.4 (0.9-3.0)
2	26 (17-44)	21 (13-36)	17 (10-30)	13 (7.7-24)	11 (6.0-20)	8.4 (4.7-16)	6.7 (3.7-13)	5.2 (2.8-10)	4.1 (2.2-8.0)	3.2 (1.7-6.2)	2.5 (1.3-4.9)
3	38 (22-54)	31 (18-47)	26 (14-40)	21 (11-33)	17 (8.5-28)	14 (6.7-23)	11 (5.3-18)	8.9 (4.1-15)	7.0 (3.2-12)	5.5 (2.5-9.3)	4.3 (1.9-7.3)
4	50 (30-62)	43 (24-56)	37 (20-49)	31 (16-42)	26 (12-36)	22 (9.9-30)	18 (7.9-25)	14 (6.2-20)	11 (4.8-16)	9.1 (3.8-13)	7.2 (2.9-10)
5	62 (40-68)	56 (33-62)	49 (27-56)	43 (22-49)	37 (18-43)	32 (15-37)	27 (12-32)	22 (9.4-26)	18 (7.5-22)	15 (5.9-18)	12 (4.6-14)
6	72	67	62	56	50	44	38	32	27	22	18