India - The probabilities of a major osteoporotic fracture in women

The following tables give the 10-year probability (%) of a major osteoporotic fracture (hip, clinical spine, forearm or proximal humerus 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 India. 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	8.0	5.0	3.3	2.4	1.8	1.5	1.2	1.1	1.1	1.0	1.0
1	12 (11-16)	7.7 (6.8-9.9)	5.1 (4.3-6.5)	3.6 (2.9-4.6)	2.8 (2.0-3.5)	2.2 (1.6-2.9)	1.9 (1.3-2.5)	1.7 (1.1-2.3)	1.6 (1.0-2.2)	1.5 (1.0-2.1)	1.5 (0.9-2.1)
2	19 (14-27)	12 (9.2-17)	7.8 (5.9-11)	5.5 (3.8-7.9)	4.2 (2.6-6.4)	3.3 (2.0-5.4)	2.8 (1.6-4.7)	2.5 (1.3-4.3)	2.4 (1.2-4.2)	2.3 (1.2-4.0)	2.2 (1.1-3.8)
3	27 (19-38)	18 (12-24)	12 (8.2-17)	8.2 (5.2-13)	6.2 (3.5-10)	4.9 (2.6-8.8)	4.1 (2.0-7.6)	3.7 (1.7-7.0)	3.5 (1.6-6.7)	3.3 (1.5-6.4)	3.2 (1.4-6.2)
4	39 (26-50)	25 (17-32)	17 (11-22)	12 (7.8-17)	9.0 (5.8-13)	7.1 (4.4-11)	5.9 (3.4-9.8)	5.3 (2.9-9.0)	5.0 (2.6-8.5)	4.7 (2.4-8.2)	4.5 (2.3-7.9)
5	52 (42-62)	36 (28-42)	24 (18-27)	17 (13-21)	13 (9.6-16)	10 (7.6-14)	8.4 (6.3-12)	7.5 (5.4-11)	7.0 (4.9-10)	6.7 (4.5-9.6)	6.4 (4.3-9.3)
6	67	48	34	24	18	14	12	10	9.7	9.2	8.8

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

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	11	7.1	5.0	3.6	2.8	2.3	1.9	1.7	1.6	1.5	1.5
1	16 (15-20)	11 (9.6-13)	7.5 (6.3-9.1)	5.5 (4.3-6.7)	4.2 (3.1-5.3)	3.4 (2.4-4.5)	2.9 (1.9-3.8)	2.6 (1.7-3.6)	2.4 (1.6-3.4)	2.3 (1.5-3.2)	2.2 (1.4-3.1)
2	24 (19-32)	16 (13-22)	11 (8.5-15)	8.2 (5.8-11)	6.3 (4.1-9.5)	5.1 (3.0-8.0)	4.2 (2.4-6.9)	3.8 (2.1-6.4)	3.6 (1.9-6.1)	3.4 (1.8-5.8)	3.2 (1.6-5.5)
3	34 (25-43)	23 (17-30)	16 (12-23)	12 (7.8-18)	9.1 (5.4-15)	7.3 (4.0-13)	6.1 (3.1-11)	5.5 (2.7-10)	5.1 (2.5-9.6)	4.8 (2.3-9.2)	4.6 (2.1-8.7)
4	46 (33-55)	32 (23-38)	23 (16-29)	17 (12-23)	13 (8.9-19)	10 (6.6-16)	8.7 (5.1-14)	7.9 (4.4-13)	7.3 (4.0-12)	6.9 (3.6-12)	6.5 (3.4-11)
5	59 (50-66)	44 (36-49)	32 (26-36)	24 (19-28)	18 (14-23)	15 (11-19)	12 (9.3-17)	11 (8.0-15)	10 (7.1-14)	9.5 (6.6-14)	9.0 (6.1-13)
6	72	56	42	32	25	20	17	15	14	13	12

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	16	11	7.7	5.7	4.4	3.5	3.0	2.7	2.5	2.3	2.2
1	23 (21-26)	16 (14-18)	11 (9.5-13)	8.4 (6.7-9.9)	6.5 (4.9-8.1)	5.2 (3.7-6.8)	4.4 (3.0-5.9)	4.0 (2.7-5.5)	3.7 (2.4-5.1)	3.4 (2.2-4.8)	3.2 (2.1-4.5)
2	32 (26-40)	23 (19-29)	16 (13-21)	12 (8.8-17)	9.5 (6.3-14)	7.6 (4.7-12)	6.4 (3.8-10)	5.8 (3.3-9.5)	5.3 (2.9-8.9)	4.9 (2.6-8.3)	4.6 (2.4-7.8)
3	43 (34-51)	31 (25-40)	23 (17-32)	17 (12-26)	13 (8.4-21)	11 (6.2-18)	9.2 (5.0-16)	8.3 (4.3-15)	7.6 (3.8-14)	7.0 (3.4-13)	6.6 (3.1-12)
4	55 (44-62)	42 (32-49)	31 (23-39)	24 (17-32)	19 (13-27)	15 (10-23)	13 (8.0-20)	12 (6.8-19)	11 (6.0-17)	9.8 (5.4-16)	9.2 (5.0-16)
5	67 (60-72)	53 (47-58)	42 (35-47)	32 (27-39)	25 (21-32)	21 (17-27)	18 (14-24)	16 (12-22)	14 (10-20)	13 (9.3-19)	13 (8.6-18)
6	77	65	53	42	34	27	23	21	19	18	17

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

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	20	15	11	8.1	6.3	5.0	4.4	3.9	3.5	3.2	3.0
1	28 (26-31)	21 (18-23)	15 (13-17)	12 (9.2-14)	9.1 (6.8-11)	7.3 (5.2-9.4)	6.3 (4.4-8.5)	5.7 (3.8-7.8)	5.1 (3.4-7.2)	4.7 (3.1-6.6)	4.3 (2.8-6.2)
2	38 (33-46)	29 (24-35)	21 (17-27)	16 (12-22)	13 (8.8-18)	10 (6.6-16)	9.0 (5.4-14)	8.1 (4.7-13)	7.3 (4.1-12)	6.7 (3.7-11)	6.2 (3.3-10)
3	49 (41-57)	38 (31-47)	29 (23-39)	23 (16-33)	18 (12-27)	14 (8.8-23)	13 (7.2-21)	11 (6.1-19)	10 (5.3-18)	9.4 (4.7-17)	8.7 (4.3-16)
4	60 (51-66)	49 (39-57)	38 (30-48)	30 (23-40)	24 (18-34)	20 (14-29)	17 (11-26)	15 (9.5-24)	14 (8.3-23)	13 (7.4-21)	12 (6.7-20)
5	70 (65-74)	59 (54-65)	49 (43-56)	39 (34-47)	32 (27-40)	26 (22-34)	23 (18-31)	21 (16-28)	19 (14-26)	17 (12-25)	16 (11-23)
6	77	69	59	49	41	34	30	27	25	23	21

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	22	16	12	9.6	7.5	6.1	5.4	4.7	4.2	3.8	3.5
1	31 (27-37)	23 (20-28)	18 (14-21)	14 (11-16)	11 (8.0-12)	8.5 (6.3-10)	7.4 (5.3-8.6)	6.5 (4.6-7.7)	5.8 (4.0-6.9)	5.2 (3.6-6.2)	4.7 (3.2-5.7)
2	42 (34-51)	32 (26-40)	25 (19-31)	19 (14-24)	15 (10-19)	12 (8.0-16)	10 (6.6-14)	8.8 (5.6-12)	7.8 (4.9-11)	7.0 (4.3-9.7)	6.3 (3.9-8.8)
3	54 (44-64)	43 (33-54)	34 (25-44)	26 (18-35)	20 (14-28)	16 (11-24)	14 (8.7-21)	12 (7.4-18)	10 (6.4-16)	9.4 (5.6-15)	8.4 (5.0-13)
4	66 (57-73)	55 (46-63)	44 (36-53)	35 (27-44)	27 (21-36)	22 (16-30)	18 (13-26)	16 (11-23)	14 (9.7-21)	12 (8.5-19)	11 (7.6-17)
5	75 (69-79)	66 (59-72)	56 (48-62)	45 (38-52)	36 (30-43)	29 (24-36)	25 (20-31)	21 (17-27)	18 (15-24)	16 (13-22)	15 (12-20)
6	81	75	67	57	47	38	32	27	24	21	19

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

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	22	17	13	9.9	7.8	6.6	5.6	4.9	4.3	3.9	3.4
1	32 (25-48)	25 (19-37)	19 (14-28)	14 (11-21)	11 (8.2-15)	9.2 (6.7-12)	7.7 (5.6-9.4)	6.6 (4.8-7.7)	5.8 (4.1-6.8)	5.1 (3.6-6.1)	4.5 (3.2-5.5)
2	44 (32-60)	35 (25-49)	27 (19-39)	21 (14-30)	16 (11-23)	13 (8.5-18)	11 (7.0-14)	9.0 (5.9-12)	7.7 (5.0-10)	6.7 (4.4-9.1)	5.8 (3.8-8.2)
3	56 (41-69)	47 (32-60)	38 (24-50)	29 (18-40)	23 (14-32)	18 (11-25)	15 (9.2-21)	12 (7.7-17)	10 (6.6-14)	8.8 (5.7-12)	7.6 (5.0-11)
4	67 (52-76)	59 (42-69)	49 (33-60)	40 (26-50)	31 (20-40)	25 (17-32)	20 (14-27)	17 (11-22)	14 (9.8-19)	12 (8.5-16)	%10.0 (7.4-14
5	76 (61-81)	69 (53-75)	61 (44-68)	52 (36-59)	42 (29-49)	35 (24-41)	28 (20-34)	23 (17-28)	19 (15-23)	15 (13-20)	13 (11-17)
6	82	78	72	64	54	46	38	31	25	21	17

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	20	16	12	9.4	7.5	6.4	5.4	4.7	4.0	3.5	3.1
1	29 (22-44)	23 (17-35)	18 (13-27)	14 (10-20)	11 (7.9-16)	9.0 (6.5-12)	7.5 (5.4-9.8)	6.3 (4.5-7.9)	5.4 (3.8-6.4)	4.7 (3.3-5.3)	4.0 (2.9-4.7)
2	39 (29-54)	32 (22-46)	25 (17-37)	20 (13-29)	15 (10-23)	13 (8.4-18)	10 (6.9-15)	8.7 (5.7-12)	7.3 (4.8-9.7)	6.2 (4.1-8.0)	5.3 (3.5-7.0)
3	50 (36-63)	42 (29-55)	34 (23-46)	27 (17-37)	22 (14-30)	18 (11-24)	15 (9.1-20)	12 (7.5-17)	9.9 (6.3-14)	8.3 (5.3-12)	7.1 (4.6-9.8)
4	61 (45-70)	53 (37-63)	45 (30-55)	37 (23-46)	30 (19-38)	25 (15-31)	20 (13-26)	16 (11-21)	14 (9.2-18)	11 (7.8-15)	9.4 (6.7-13)
5	70 (54-75)	63 (46-70)	56 (38-63)	48 (31-55)	40 (26-46)	33 (22-39)	27 (18-33)	22 (15-27)	18 (13-23)	15 (11-19)	13 (9.9-16)
6	77	72	66	59	51	44	37	30	25	20	17

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

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	17	14	11	8.7	7.3	6.2	5.3	4.6	3.9	3.4	3.0
1	25 (18-38)	20 (15-30)	16 (11-24)	12 (8.9-19)	10 (7.3-15)	8.7 (6.1-12)	7.3 (5.1-9.9)	6.2 (4.3-8.1)	5.3 (3.7-6.7)	4.5 (3.1-5.5)	3.9 (2.7-4.6)
2	34 (24-47)	28 (19-40)	22 (15-33)	18 (12-26)	15 (9.6-21)	12 (7.9-18)	10 (6.6-14)	8.5 (5.5-12)	7.2 (4.6-9.8)	6.1 (3.9-8.1)	5.2 (3.3-6.8)
3	44 (31-57)	37 (25-49)	30 (20-41)	25 (16-34)	20 (13-28)	17 (11-23)	14 (8.7-20)	12 (7.3-16)	9.8 (6.1-14)	8.2 (5.2-11)	6.9 (4.4-9.7)
4	54 (38-65)	47 (32-58)	40 (26-50)	33 (21-42)	28 (17-36)	23 (15-30)	20 (12-25)	16 (10-21)	13 (8.6-18)	11 (7.3-15)	9.4 (6.2-13)
5	64 (47-70)	58 (40-65)	51 (33-58)	44 (28-50)	37 (23-44)	32 (20-38)	27 (17-32)	22 (14-27)	18 (12-23)	15 (10-19)	13 (9.0-16)
6	73	68	62	55	48	42	36	30	25	21	17

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	15	12	9.9	8.1	7.0	6.1	5.3	4.6	3.9	3.4	3.0
1	20 (15-30)	17 (12-24)	14 (9.5-20)	11 (7.7-16)	9.6 (6.6-13)	8.3 (5.6-11)	7.1 (4.8-9.5)	6.1 (4.1-7.9)	5.3 (3.5-6.6)	4.5 (3.1-5.6)	3.9 (2.6-4.7)
2	27 (19-38)	23 (15-32)	19 (12-26)	15 (10-22)	13 (8.6-19)	11 (7.3-16)	9.7 (6.2-13)	8.3 (5.3-11)	7.1 (4.5-9.5)	6.0 (3.8-8.0)	5.2 (3.3-6.8)
3	36 (24-47)	30 (20-40)	25 (16-34)	21 (13-29)	18 (11-25)	15 (9.6-21)	13 (8.2-18)	11 (7.0-15)	9.5 (5.9-13)	8.1 (5.1-11)	6.9 (4.3-9.6)
4	45 (31-55)	39 (26-48)	33 (21-42)	28 (18-36)	24 (15-31)	21 (13-27)	18 (11-23)	15 (9.5-20)	13 (8.1-17)	11 (7.0-15)	9.3 (6.0-13)
5	55 (39-62)	49 (33-56)	43 (28-50)	37 (24-44)	32 (20-39)	28 (18-34)	24 (15-30)	21 (13-26)	18 (12-22)	15 (10-19)	13 (8.7-16)
6	64	59	53	47	42	37	32	28	24	20	17