Italy - The probabilities of a major osteoporotic fracture in men

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 Italy. 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	20	12	8.0	5.6	4.1	3.2	2.7	2.3	2.0	1.9	1.9
1	29 (24-37)	19 (17-24)	12 (11-16)	8.5 (7.1-11)	6.3 (4.9-7.9)	4.9 (3.6-6.2)	4.0 (2.8-5.3)	3.4 (2.3-4.6)	3.1 (2.0-4.2)	2.9 (1.9-4.0)	2.8 (1.8-3.9)
2	42 (32-56)	28 (22-38)	18 (15-26)	13 (9.6-18)	9.4 (6.5-14)	7.3 (4.6-11)	6.0 (3.5-9.7)	5.1 (2.8-8.5)	4.5 (2.4-7.8)	4.3 (2.2-7.4)	4.1 (2.1-7.2)
3	57 (42-72)	39 (29-52)	27 (20-35)	19 (13-27)	14 (8.7-22)	11 (6.1-18)	8.8 (4.6-15)	7.4 (3.7-14)	6.6 (3.2-12)	6.2 (2.9-12)	6.0 (2.7-11)
4	71 (56-84)	53 (38-65)	38 (26-46)	27 (18-34)	20 (13-27)	15 (10-23)	13 (7.7-20)	11 (6.1-17)	9.4 (5.2-16)	8.9 (4.7-15)	8.5 (4.4-15)
5	84 (76-91)	68 (57-77)	51 (41-57)	37 (29-42)	28 (21-33)	22 (17-27)	18 (13-23)	15 (11-20)	13 (9.6-18)	12 (8.8-18)	12 (8.2-17)
6	92	81	65	50	38	30	24	20	18	17	16

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

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	20	13	8.7	6.1	4.5	3.6	2.9	2.4	2.2	2.0	1.9
1	29 (25-35)	19 (17-23)	13 (12-16)	9.2 (7.8-11)	6.9 (5.4-8.3)	5.3 (4.0-6.6)	4.3 (3.1-5.6)	3.6 (2.5-4.9)	3.3 (2.2-4.5)	3.0 (2.0-4.2)	2.9 (1.9-4.0)
2	41 (33-53)	28 (23-37)	19 (16-26)	14 (10-19)	10 (7.2-14)	7.9 (5.1-12)	6.4 (3.8-10)	5.3 (3.0-8.7)	4.8 (2.6-8.0)	4.5 (2.4-7.6)	4.2 (2.2-7.2)
3	55 (42-68)	39 (30-50)	28 (21-36)	20 (14-28)	15 (9.6-23)	11 (6.8-19)	9.2 (5.1-16)	7.7 (4.0-14)	6.9 (3.4-13)	6.4 (3.1-12)	6.0 (2.8-11)
4	69 (55-80)	53 (39-63)	38 (27-45)	28 (19-35)	21 (14-29)	16 (11-24)	13 (8.4-20)	11 (6.6-18)	9.8 (5.6-16)	9.1 (5.0-15)	8.6 (4.6-14)
5	81 (75-88)	66 (58-74)	51 (43-56)	38 (31-43)	29 (23-35)	23 (18-28)	18 (14-24)	15 (12-21)	14 (10-19)	13 (9.0-18)	12 (8.2-17)
6	90	79	64	50	39	31	25	21	19	17	16

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	20	14	9.5	6.9	5.2	4.0	3.3	2.7	2.4	2.2	2.1
1	28 (25-33)	20 (18-23)	14 (12-16)	10 (8.6-12)	7.7 (6.1-9.0)	6.0 (4.5-7.4)	4.8 (3.5-6.2)	4.0 (2.8-5.3)	3.6 (2.4-4.9)	3.3 (2.2-4.6)	3.1 (2.0-4.3)
2	39 (33-49)	28 (23-36)	20 (17-26)	15 (12-19)	11 (8.1-15)	8.8 (5.9-13)	7.1 (4.4-11)	5.8 (3.5-9.2)	5.3 (3.0-8.6)	4.8 (2.7-8.0)	4.5 (2.4-7.5)
3	52 (42-62)	39 (30-47)	28 (22-36)	21 (16-29)	16 (11-24)	13 (7.9-20)	10 (5.9-17)	8.4 (4.6-14)	7.5 (3.9-13)	6.9 (3.5-13)	6.4 (3.1-12)
4	65 (53-73)	51 (40-59)	39 (29-45)	29 (21-37)	22 (16-30)	18 (12-25)	14 (9.6-21)	12 (7.4-18)	11 (6.3-17)	9.7 (5.5-16)	9.0 (5.0-15)
5	76 (71-82)	63 (57-69)	50 (44-55)	39 (33-44)	30 (25-36)	24 (20-30)	20 (16-25)	16 (13-22)	15 (11-20)	13 (9.6-19)	12 (8.6-17)
6	85	75	63	50	40	32	26	22	20	18	17

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

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	19	14	10	7.5	5.7	4.5	3.6	3.0	2.7	2.4	2.2
1	27 (25-30)	20 (18-22)	15 (13-16)	11 (9.2-12)	8.4 (6.7-9.7)	6.6 (5.0-8.0)	5.3 (3.9-6.7)	4.4 (3.1-5.8)	3.9 (2.7-5.3)	3.5 (2.4-4.9)	3.2 (2.1-4.5)
2	37 (31-45)	28 (23-34)	21 (17-26)	16 (12-20)	12 (9.0-16)	9.4 (6.6-13)	7.6 (5.0-11)	6.3 (3.9-9.7)	5.6 (3.3-8.9)	5.1 (2.9-8.2)	4.6 (2.6-7.6)
3	48 (40-56)	37 (30-44)	28 (23-36)	22 (17-29)	17 (12-24)	13 (8.9-20)	11 (6.7-17)	8.9 (5.2-15)	7.9 (4.4-14)	7.2 (3.8-13)	6.6 (3.4-12)
4	60 (50-66)	48 (39-54)	38 (30-44)	29 (22-37)	23 (17-31)	18 (14-26)	15 (11-22)	12 (8.3-19)	11 (7.0-17)	10 (6.0-16)	9.1 (5.3-15)
5	70 (65-74)	59 (54-63)	48 (43-53)	39 (34-44)	31 (26-37)	25 (21-31)	20 (17-26)	17 (14-22)	15 (12-20)	14 (10-19)	12 (8.8-18)
6	78	69	59	49	40	32	27	22	20	18	17

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	19	14	11	8.3	6.4	5.1	4.1	3.4	3.0	2.7	2.4
1	28 (24-33)	21 (18-25)	16 (13-19)	12 (9.8-15)	9.3 (7.4-11)	7.2 (5.6-8.7)	5.7 (4.3-6.9)	4.8 (3.5-5.7)	4.2 (3.0-4.9)	3.7 (2.6-4.4)	3.3 (2.3-3.9)
2	38 (31-46)	29 (24-37)	23 (18-29)	17 (13-22)	13 (9.9-17)	10 (7.5-14)	8.1 (5.7-11)	6.7 (4.6-9.1)	5.8 (3.8-7.9)	5.1 (3.3-7.0)	4.5 (2.8-6.3)
3	50 (41-59)	40 (32-49)	31 (24-40)	24 (18-32)	19 (13-26)	15 (10-20)	11 (7.6-16)	9.4 (6.1-14)	8.0 (5.0-12)	6.9 (4.3-11)	6.1 (3.7-9.6)
4	61 (53-68)	52 (43-59)	42 (34-50)	33 (26-41)	26 (20-33)	20 (15-26)	16 (12-21)	13 (9.3-18)	11 (7.7-16)	9.4 (6.5-14)	8.3 (5.7-12)
5	71 (64-75)	63 (55-68)	53 (46-59)	44 (37-50)	35 (29-41)	28 (23-33)	22 (18-27)	18 (14-22)	15 (12-19)	13 (10-17)	11 (9.1-15)
6	78	72	64	55	46	37	30	24	20	17	15

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

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	20	15	12	9.5	7.5	6.0	4.8	4.1	3.6	3.2	2.8
1	29 (23-47)	23 (18-38)	19 (14-30)	15 (11-23)	11 (8.4-18)	9.0 (6.5-14)	7.1 (5.1-10)	5.9 (4.2-8.3)	5.1 (3.6-6.7)	4.4 (3.1-5.5)	3.8 (2.7-4.5)
2	41 (30-57)	34 (24-49)	27 (19-41)	22 (14-33)	17 (11-26)	13 (8.7-20)	10 (6.8-16)	8.6 (5.6-13)	7.2 (4.6-10)	6.1 (3.9-8.4)	5.2 (3.4-7.0)
3	53 (39-66)	45 (31-59)	38 (25-51)	31 (19-42)	25 (15-35)	20 (12-28)	15 (9.1-22)	13 (7.4-18)	10 (6.2-15)	8.6 (5.2-12)	7.3 (4.5-10)
4	63 (48-73)	57 (40-67)	49 (33-60)	42 (27-52)	35 (21-44)	28 (17-36)	22 (13-29)	18 (11-24)	15 (9.1-19)	12 (7.7-16)	10 (6.6-14)
5	72 (57-78)	67 (49-73)	61 (42-67)	53 (35-61)	46 (29-53)	38 (23-45)	31 (19-37)	25 (16-30)	21 (13-25)	17 (11-21)	14 (9.9-18)
6	79	76	70	64	57	50	42	35	29	24	20

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	13	11	8.5	6.9	5.7	4.9	4.3	3.7	3.3
1	29 (22-45)	24 (18-38)	19 (14-32)	16 (12-26)	13 (9.3-21)	10 (7.4-16)	8.4 (6.0-13)	7.1 (5.0-11)	6.1 (4.3-8.8)	5.2 (3.7-7.3)	4.5 (3.2-6.0)
2	39 (28-55)	33 (23-48)	28 (19-41)	23 (15-34)	19 (12-28)	15 (9.9-23)	12 (8.0-19)	10 (6.7-16)	8.7 (5.7-13)	7.4 (4.8-11)	6.3 (4.1-9.0)
3	49 (35-63)	43 (30-57)	37 (25-50)	32 (20-44)	26 (17-37)	22 (13-31)	18 (11-25)	15 (9.0-21)	12 (7.6-17)	11 (6.4-15)	8.9 (5.4-12)
4	59 (43-69)	54 (37-64)	48 (32-58)	42 (27-52)	36 (22-45)	30 (18-38)	25 (15-32)	21 (12-27)	18 (11-23)	15 (9.0-19)	12 (7.8-16)
5	68 (52-74)	63 (46-70)	58 (40-65)	52 (34-59)	46 (29-53)	40 (24-46)	34 (20-40)	29 (17-34)	24 (15-29)	21 (13-25)	17 (11-21)
6	76	72	67	62	56	50	44	38	33	28	24

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

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	18	15	12	10	8.5	7.0	5.9	5.2	4.5	4.0	3.5
1	26 (20-41)	22 (16-36)	18 (14-30)	15 (11-25)	13 (9.1-21)	10 (7.5-17)	8.8 (6.2-14)	7.6 (5.4-12)	6.6 (4.6-10)	5.7 (4.0-8.5)	4.9 (3.4-7.1)
2	35 (25-51)	31 (21-45)	26 (18-39)	22 (15-33)	19 (12-28)	15 (10-24)	13 (8.4-20)	11 (7.2-17)	9.6 (6.2-15)	8.2 (5.3-12)	7.1 (4.5-10)
3	46 (32-59)	41 (27-54)	36 (23-48)	31 (20-43)	26 (16-37)	22 (14-31)	19 (11-27)	16 (9.7-23)	14 (8.3-20)	12 (7.1-17)	10 (6.1-14)
4	56 (40-66)	51 (35-62)	46 (30-57)	41 (26-51)	35 (22-45)	30 (18-39)	26 (15-34)	23 (13-30)	20 (11-26)	17 (9.8-22)	14 (8.5-19)
5	66 (48-71)	61 (43-68)	57 (38-63)	51 (33-58)	46 (28-53)	40 (24-47)	35 (21-42)	31 (18-37)	27 (16-32)	24 (14-28)	20 (12-25)
6	73	70	66	62	57	51	46	41	36	32	28

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	13	11	9.5	8.0	6.7	5.7	5.0	4.4	3.9	3.4	3.0
1	19 (14-31)	17 (12-27)	14 (10-23)	12 (8.5-20)	10 (7.1-17)	8.5 (6.0-14)	7.4 (5.2-12)	6.5 (4.5-11)	5.7 (4.0-9.2)	5.0 (3.5-7.9)	4.4 (3.0-6.8)
2	27 (19-40)	24 (16-36)	20 (13-31)	17 (11-27)	15 (9.6-23)	13 (8.0-20)	11 (7.0-17)	9.6 (6.1-15)	8.4 (5.3-13)	7.4 (4.7-11)	6.5 (4.1-9.9)
3	36 (24-49)	32 (21-44)	28 (18-40)	25 (15-35)	21 (13-31)	18 (11-27)	16 (9.5-23)	14 (8.3-20)	12 (7.2-18)	11 (6.3-16)	9.4 (5.5-14)
4	47 (31-57)	42 (27-53)	38 (23-48)	34 (20-43)	30 (17-38)	26 (15-34)	23 (13-30)	20 (11-27)	18 (9.9-24)	16 (8.7-21)	14 (7.6-18)
5	57 (39-64)	53 (34-60)	49 (30-55)	44 (26-51)	39 (23-46)	35 (20-41)	31 (17-37)	28 (15-33)	25 (14-30)	22 (12-26)	19 (11-23)
6	66	63	59	55	50	46	42	38	34	30	27