

Italy - 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 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	11	6.0	3.1	1.6	0.8	0.4	0.2	0.1	0.1	0.0	0.0
1	18 (12-23)	9.6 (6.3-12)	5.0 (3.3-6.5)	2.6 (1.7-3.4)	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)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	27 (17-39)	15 (8.9-22)	7.9 (4.6-12)	4.1 (2.4-6.3)	2.1 (1.2-3.2)	1.1 (0.6-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	39 (24-57)	23 (13-35)	12 (7.0-20)	6.5 (3.6-11)	3.4 (1.9-5.6)	1.7 (0.9-2.9)	0.9 (0.5-1.5)	0.5 (0.3-0.8)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	54 (38-72)	33 (22-48)	19 (12-29)	10 (6.2-16)	5.3 (3.2-8.4)	2.7 (1.6-4.4)	1.4 (0.8-2.2)	0.7 (0.4-1.2)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	70 (60-83)	47 (37-61)	28 (21-38)	15 (11-22)	8.1 (6.0-12)	4.2 (3.1-6.2)	2.2 (1.6-3.2)	1.1 (0.8-1.7)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
6	85	63	40	23	12	6.5	3.3	1.8	0.9	0.5	0.3

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	11	6.2	3.4	1.8	1.0	0.5	0.3	0.2	0.1	0.1	0.0
1	17 (12-21)	9.7 (6.5-12)	5.3 (3.5-6.5)	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)
2	26 (16-36)	15 (9.1-21)	8.3 (5.0-12)	4.5 (2.7-6.6)	2.5 (1.5-3.6)	1.3 (0.8-1.9)	0.7 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	37 (24-53)	22 (14-34)	13 (7.5-20)	7.1 (4.1-11)	3.9 (2.2-6.2)	2.1 (1.2-3.4)	1.1 (0.6-1.8)	0.6 (0.4-1.0)	0.3 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	51 (38-68)	32 (22-47)	19 (13-29)	11 (7.0-17)	5.9 (3.8-9.3)	3.2 (2.1-5.1)	1.7 (1.1-2.8)	1.0 (0.6-1.5)	0.5 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
5	67 (59-80)	45 (38-59)	28 (23-38)	16 (13-23)	9.0 (7.1-13)	5.0 (3.9-7.1)	2.7 (2.1-3.9)	1.5 (1.2-2.2)	0.8 (0.7-1.2)	0.5 (0.4-0.7)	0.3 (0.2-0.4)
6	82	61	40	24	14	7.5	4.1	2.3	1.3	0.7	0.4

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	12	7.1	4.0	2.3	1.3	0.7	0.4	0.2	0.1	0.1	0.0
1	19 (13-22)	11 (7.5-13)	6.3 (4.2-7.4)	3.5 (2.4-4.2)	2.0 (1.3-2.4)	1.1 (0.7-1.3)	0.6 (0.4-0.8)	0.4 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.1-0.1)
2	28 (18-36)	17 (10-22)	9.6 (6.0-13)	5.5 (3.4-7.5)	3.1 (1.9-4.3)	1.7 (1.1-2.4)	1.0 (0.6-1.4)	0.6 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	39 (26-54)	24 (16-35)	14 (9.0-22)	8.3 (5.1-13)	4.7 (2.9-7.2)	2.7 (1.6-4.1)	1.5 (0.9-2.3)	0.9 (0.5-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	53 (41-69)	35 (25-48)	21 (15-31)	12 (8.7-19)	7.2 (4.9-11)	4.1 (2.8-6.2)	2.3 (1.6-3.6)	1.3 (0.9-2.1)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.3 (0.2-0.4)
5	67 (61-80)	47 (41-60)	30 (26-41)	18 (15-25)	11 (8.8-15)	6.1 (5.0-8.7)	3.5 (2.8-5.0)	2.0 (1.7-2.9)	1.2 (1.0-1.7)	0.7 (0.6-1.0)	0.4 (0.3-0.6)
6	81	62	42	26	16	9.1	5.3	3.1	1.8	1.0	0.6

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	14	8.3	4.9	2.9	1.7	1.0	0.6	0.4	0.2	0.1	0.1
1	21 (15-24)	13 (8.8-15)	7.5 (5.2-9.0)	4.4 (3.0-5.3)	2.6 (1.8-3.1)	1.5 (1.0-1.8)	0.9 (0.6-1.1)	0.5 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	30 (20-38)	18 (12-24)	11 (7.3-15)	6.7 (4.3-8.9)	3.9 (2.5-5.2)	2.3 (1.4-3.1)	1.4 (0.9-1.9)	0.8 (0.5-1.1)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	41 (29-54)	27 (18-37)	16 (11-23)	9.9 (6.4-14)	5.9 (3.8-8.6)	3.5 (2.2-5.1)	2.1 (1.3-3.1)	1.3 (0.8-1.9)	0.8 (0.5-1.1)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
4	54 (44-69)	37 (28-50)	24 (18-33)	15 (11-21)	8.8 (6.3-13)	5.2 (3.7-7.7)	3.1 (2.2-4.7)	1.9 (1.3-2.8)	1.1 (0.8-1.7)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
5	68 (62-79)	50 (43-62)	33 (28-44)	21 (17-29)	13 (11-18)	7.7 (6.2-11)	4.7 (3.8-6.6)	2.8 (2.3-4.0)	1.7 (1.4-2.4)	1.0 (0.8-1.5)	0.6 (0.5-0.9)
6	81	64	45	30	19	11	6.9	4.2	2.6	1.5	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	17	10	6.4	3.9	2.4	1.5	0.9	0.6	0.4	0.2	0.1
1	26 (23-32)	17 (14-21)	11 (8.9-13)	6.5 (5.5-8.2)	4.0 (3.4-5.0)	2.5 (2.1-3.1)	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)
2	39 (32-50)	26 (21-34)	17 (13-23)	11 (8.3-14)	6.6 (5.1-9.0)	4.1 (3.1-5.6)	2.6 (2.0-3.6)	1.6 (1.2-2.3)	1.0 (0.8-1.4)	0.6 (0.5-0.9)	0.4 (0.3-0.6)
3	56 (45-66)	40 (30-50)	27 (20-35)	17 (12-23)	11 (7.7-15)	6.8 (4.8-9.3)	4.3 (3.0-6.0)	2.7 (1.9-3.8)	1.7 (1.2-2.4)	1.1 (0.8-1.5)	0.7 (0.5-1.0)
4	72 (62-78)	56 (45-64)	40 (31-48)	27 (20-33)	17 (13-22)	11 (8.0-14)	7.2 (5.1-9.1)	4.6 (3.2-5.8)	2.9 (2.0-3.7)	1.8 (1.3-2.3)	1.1 (0.8-1.5)
5	84 (79-87)	72 (64-77)	56 (48-61)	40 (33-45)	27 (22-31)	18 (14-20)	12 (9.2-13)	7.5 (5.9-8.7)	4.8 (3.7-5.6)	3.0 (2.4-3.5)	1.9 (1.5-2.2)
6	90	84	73	57	41	28	19	12	7.8	5.0	3.2

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	13	8.6	5.5	3.5	2.3	1.5	1.0	0.7	0.4	0.3
1	34 (27-60)	24 (18-45)	16 (12-32)	11 (7.7-22)	6.9 (5.0-14)	4.6 (3.3-9.7)	3.1 (2.2-6.5)	2.0 (1.4-4.3)	1.3 (0.9-2.8)	0.9 (0.6-1.9)	0.6 (0.4-1.2)
2	51 (36-76)	39 (25-63)	28 (17-49)	19 (11-35)	13 (7.0-24)	8.6 (4.6-17)	5.8 (3.1-11)	3.8 (2.0-7.6)	2.5 (1.3-5.1)	1.7 (0.9-3.4)	1.1 (0.6-2.2)
3	68 (49-84)	56 (35-75)	43 (24-63)	31 (16-49)	22 (10-36)	15 (7.0-26)	10 (4.6-18)	7.0 (3.1-12)	4.7 (2.0-8.3)	3.1 (1.3-5.5)	2.0 (0.9-3.7)
4	81 (64-88)	72 (49-83)	61 (36-74)	48 (25-62)	35 (17-48)	25 (11-36)	18 (7.6-26)	12 (5.1-18)	8.3 (3.4-12)	5.5 (2.2-8.3)	3.7 (1.5-5.5)
5	88 (77-91)	83 (66-88)	76 (52-82)	65 (39-72)	52 (27-59)	40 (19-46)	29 (13-34)	20 (8.9-25)	14 (5.9-17)	9.6 (4.0-12)	6.4 (2.6-7.8)
6	91	90	86	80	70	57	44	33	23	16	11

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	22	16	11	7.3	5.0	3.4	2.4	1.6	1.1	0.8	0.5
1	37 (28-62)	27 (20-50)	19 (14-38)	14 (9.5-28)	9.5 (6.5-20)	6.7 (4.5-14)	4.7 (3.1-10)	3.3 (2.2-7.0)	2.3 (1.5-4.9)	1.6 (1.0-3.4)	1.1 (0.7-2.3)
2	52 (37-75)	42 (27-65)	32 (19-54)	23 (13-42)	17 (9.1-31)	12 (6.3-23)	8.6 (4.4-17)	6.0 (3.1-12)	4.2 (2.1-8.5)	2.9 (1.5-5.9)	2.0 (1.0-4.1)
3	67 (49-82)	57 (37-76)	47 (27-66)	36 (19-54)	27 (13-43)	20 (9.5-33)	15 (6.7-25)	11 (4.6-18)	7.5 (3.2-13)	5.3 (2.2-9.3)	3.7 (1.5-6.6)
4	78 (62-86)	71 (50-82)	62 (39-75)	52 (28-66)	41 (20-55)	32 (15-45)	24 (11-35)	18 (7.4-26)	13 (5.2-19)	9.0 (3.6-14)	6.4 (2.5-9.8)
5	85 (73-88)	81 (64-85)	75 (53-80)	67 (42-74)	57 (32-65)	47 (24-55)	37 (17-44)	28 (12-34)	21 (8.9-26)	15 (6.2-19)	11 (4.4-14)
6	88	87	84	79	72	63	53	42	32	24	17

Ten year probability of hip fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in women 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	20	15	11	7.6	5.5	4.0	2.9	2.1	1.6	1.1	0.8	
1	33 (26-58)	25 (19-47)	19 (14-37)	14 (9.8-28)	10 (7.2-22)	7.7 (5.3-16)	5.7 (3.9-12)	4.2 (2.8-9.0)	3.1 (2.1-6.6)	2.2 (1.5-4.8)	1.6 (1.1-3.5)	
2	48 (34-70)	39 (25-61)	31 (19-51)	23 (14-41)	18 (10-33)	14 (7.4-26)	10 (5.5-20)	7.6 (4.0-15)	5.6 (2.9-11)	4.1 (2.1-8.3)	3.0 (1.5-6.1)	
3	62 (44-78)	53 (35-72)	45 (27-63)	36 (20-54)	29 (15-44)	22 (11-36)	17 (8.2-28)	13 (6.0-22)	9.8 (4.4-17)	7.3 (3.2-12)	5.4 (2.3-9.3)	
4	73 (56-83)	67 (46-78)	59 (37-72)	50 (28-64)	42 (22-55)	34 (17-47)	27 (12-38)	21 (9.3-31)	16 (6.9-24)	12 (5.0-18)	9.2 (3.7-14)	
5	81 (67-85)	77 (59-82)	72 (50-77)	65 (40-71)	57 (32-65)	49 (26-57)	41 (20-48)	33 (15-39)	26 (11-31)	20 (8.4-25)	15 (6.2-19)	
6	85	84	81	77	71	64	56	47	39	31	24	

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	14	11	8.1	6.2	4.8	3.7	2.9	2.2	1.7	1.3	1.0	
1	24 (18-45)	19 (14-37)	15 (11-30)	11 (8.0-24)	9.0 (6.3-19)	7.0 (4.9-15)	5.5 (3.8-12)	4.3 (2.9-9.2)	3.3 (2.2-7.2)	2.5 (1.7-5.5)	1.9 (1.3-4.3)	
2	36 (24-57)	30 (19-49)	24 (15-41)	19 (11-34)	15 (8.8-28)	12 (6.8-23)	9.7 (5.3-18)	7.6 (4.1-15)	5.9 (3.1-12)	4.6 (2.4-9.1)	3.6 (1.9-7.1)	
3	50 (32-67)	43 (26-60)	36 (20-53)	30 (16-45)	25 (13-38)	20 (10-32)	16 (7.8-26)	13 (6.1-21)	10 (4.8-17)	8.0 (3.7-13)	6.2 (2.8-11)	
4	63 (43-74)	56 (35-69)	49 (28-62)	42 (23-55)	36 (18-48)	31 (15-41)	25 (12-35)	21 (9.1-29)	17 (7.1-24)	13 (5.6-19)	10 (4.3-15)	
5	73 (54-78)	68 (46-74)	62 (39-69)	56 (32-63)	50 (27-57)	44 (22-50)	37 (18-44)	31 (14-37)	26 (11-31)	21 (8.9-25)	17 (7.0-21)	
6	80	78	74	69	64	58	51	44	38	32	26	