

Italy - 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 body mass index (BMI kg/m²), 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.

Age = 50 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.1	2.8	2.6	2.3	2.0	1.7	1.5
1	5.0 (3.5-7.5)	4.4 (3.0-6.3)	4.1 (2.8-5.7)	3.6 (2.4-4.9)	3.1 (2.1-4.3)	2.7 (1.8-3.7)	2.4 (1.6-3.3)
2	8.2 (4.5-13)	7.0 (3.8-12)	6.3 (3.4-11)	5.5 (2.9-9.5)	4.8 (2.5-8.3)	4.2 (2.2-7.3)	3.7 (1.9-6.4)
3	13 (6.6-22)	11 (5.3-19)	9.7 (4.7-17)	8.4 (4.0-15)	7.3 (3.5-13)	6.4 (3.0-12)	5.6 (2.6-10)
4	20 (11-30)	17 (9.3-26)	14 (7.9-23)	13 (6.8-20)	11 (5.9-18)	9.6 (5.1-16)	8.4 (4.4-14)
5	31 (19-38)	25 (16-32)	21 (14-28)	19 (13-25)	16 (11-22)	14 (9.6-19)	12 (8.4-17)
6	45	36	31	27	23	21	18

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.0	3.5	3.2	2.8	2.4	2.1	1.9
1	6.6 (4.7-9.5)	5.6 (3.9-7.8)	5.0 (3.5-6.8)	4.4 (3.0-5.9)	3.8 (2.6-5.1)	3.3 (2.3-4.5)	2.9 (2.0-3.9)
2	11 (6.1-17)	8.8 (4.9-14)	7.8 (4.3-13)	6.8 (3.7-11)	5.9 (3.2-9.9)	5.1 (2.8-8.6)	4.5 (2.4-7.6)
3	17 (9.2-27)	14 (7.1-23)	12 (6.0-21)	10 (5.1-18)	8.9 (4.4-16)	7.8 (3.8-14)	6.8 (3.3-12)
4	26 (15-37)	21 (12-31)	18 (10-28)	15 (8.7-24)	13 (7.5-21)	12 (6.4-19)	10 (5.5-16)
5	38 (25-46)	30 (21-38)	26 (18-33)	22 (16-29)	20 (14-26)	17 (12-22)	15 (10-20)
6	54	43	37	32	28	25	21

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.7	4.8	4.3	3.7	3.2	2.8	2.4
1	9.3 (6.8-13)	7.6 (5.4-10)	6.7 (4.7-8.8)	5.8 (4.0-7.6)	5.0 (3.5-6.6)	4.3 (3.0-5.7)	3.8 (2.6-5.0)
2	15 (9.1-22)	12 (7.0-18)	10 (5.8-16)	8.8 (5.0-14)	7.7 (4.3-12)	6.6 (3.7-11)	5.8 (3.2-9.5)
3	23 (14-34)	18 (10-29)	15 (8.3-26)	13 (7.1-23)	12 (6.1-20)	10 (5.2-17)	8.7 (4.5-15)
4	34 (21-47)	27 (17-39)	23 (14-34)	20 (12-30)	17 (10-27)	15 (8.8-23)	13 (7.5-20)
5	49 (36-57)	39 (28-48)	33 (24-41)	29 (21-36)	25 (18-32)	22 (16-28)	19 (14-25)
6	66	54	46	40	35	31	27

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.2	6.6	5.7	4.9	4.2	3.7	3.2
1	13 (10-17)	10 (7.7-13)	8.8 (6.4-11)	7.6 (5.4-9.8)	6.5 (4.7-8.4)	5.6 (4.0-7.2)	4.9 (3.4-6.3)
2	20 (14-29)	16 (10-23)	13 (8.1-20)	12 (6.9-18)	10 (5.8-15)	8.6 (5.0-13)	7.4 (4.3-12)
3	31 (21-42)	24 (15-36)	20 (12-32)	17 (9.9-28)	15 (8.4-24)	13 (7.1-21)	11 (6.1-19)
4	44 (30-57)	35 (24-48)	29 (20-42)	25 (17-37)	22 (14-33)	19 (12-29)	16 (10-25)
5	60 (48-68)	49 (38-58)	41 (32-50)	36 (28-44)	31 (24-39)	27 (21-34)	24 (18-30)
6	75	65	55	49	43	38	33

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	12	9.8	8.2	7.0	6.0	5.1	4.4
1	20 (15-24)	15 (12-18)	12 (9.3-15)	10 (7.9-13)	8.9 (6.7-11)	7.6 (5.7-9.7)	6.5 (4.8-8.4)
2	30 (21-39)	23 (15-30)	18 (12-25)	16 (10-22)	13 (8.5-18)	11 (7.2-16)	9.6 (6.1-14)
3	44 (32-58)	34 (23-48)	27 (18-39)	23 (15-34)	20 (12-29)	17 (10-25)	14 (8.8-22)
4	61 (49-74)	49 (38-63)	39 (29-53)	34 (25-46)	29 (21-40)	25 (18-35)	21 (15-30)
5	76 (70-82)	66 (59-74)	54 (47-64)	48 (41-56)	41 (35-50)	35 (29-43)	30 (25-37)
6	85	80	71	64	57	50	43

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	19	15	12	10	8.9	7.6	6.5
1	30 (23-42)	23 (18-31)	19 (14-23)	16 (12-19)	13 (10-16)	11 (8.4-13)	9.5 (7.1-12)
2	45 (31-60)	36 (24-48)	28 (18-37)	24 (15-31)	20 (13-26)	17 (11-22)	14 (9.1-19)
3	60 (44-75)	51 (35-67)	41 (27-56)	35 (23-49)	30 (19-42)	25 (16-36)	21 (13-30)
4	74 (60-83)	67 (52-80)	57 (42-72)	50 (36-65)	43 (31-57)	37 (26-50)	31 (22-43)
5	82 (74-87)	80 (69-86)	73 (62-81)	67 (54-75)	59 (48-69)	52 (41-61)	45 (35-54)
6	87	87	85	81	75	68	61

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	26	21	18	15	13	11	9.1
1	38 (30-53)	32 (24-43)	26 (20-33)	22 (17-28)	19 (14-23)	16 (12-19)	13 (9.9-16)
2	52 (39-67)	45 (32-59)	38 (26-50)	32 (22-43)	27 (18-36)	23 (15-31)	19 (13-25)
3	64 (50-77)	59 (45-72)	52 (38-66)	45 (32-58)	39 (27-51)	33 (22-44)	28 (19-37)
4	74 (62-82)	71 (59-80)	66 (53-77)	59 (46-72)	53 (40-65)	46 (34-58)	39 (29-51)
5	81 (72-85)	80 (71-85)	78 (67-84)	73 (61-80)	66 (54-75)	60 (48-68)	53 (41-62)
6	85	85	85	82	78	72	66

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	28	24	21	18	15	13	11
1	40 (31-55)	35 (27-48)	31 (23-39)	26 (20-33)	22 (16-28)	18 (14-23)	15 (11-19)
2	53 (41-69)	48 (35-63)	43 (30-55)	37 (25-48)	31 (21-41)	26 (18-34)	22 (15-29)
3	65 (51-77)	61 (47-74)	56 (43-69)	50 (36-62)	43 (31-55)	37 (26-48)	31 (21-41)
4	74 (62-82)	72 (60-81)	69 (56-79)	63 (49-74)	56 (43-68)	49 (36-62)	43 (31-55)
5	79 (72-83)	80 (71-84)	78 (69-84)	74 (63-80)	68 (56-76)	62 (50-71)	55 (44-64)
6	81	84	84	82	78	73	68

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	24	22	20	17	14	12	9.6
1	35 (26-49)	31 (23-43)	28 (21-37)	24 (18-31)	20 (15-26)	17 (12-21)	14 (9.9-17)
2	47 (35-63)	43 (31-58)	39 (28-51)	33 (23-44)	28 (19-37)	24 (16-31)	20 (13-26)
3	59 (44-72)	55 (41-69)	52 (38-65)	45 (32-58)	39 (26-51)	33 (22-44)	28 (18-37)
4	68 (55-77)	66 (53-76)	64 (50-74)	57 (44-68)	51 (37-62)	44 (31-56)	38 (26-49)
5	74 (66-78)	75 (65-80)	74 (63-80)	68 (57-76)	62 (50-71)	56 (44-65)	49 (38-58)
6	75	79	80	77	73	67	61