

Portugal - 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 Portugal. 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	1.8	1.6	1.5	1.3	1.2	1.0	0.9
1	3.0 (2.0-4.5)	2.6 (1.8-3.7)	2.4 (1.6-3.3)	2.1 (1.4-2.9)	1.8 (1.2-2.5)	1.6 (1.1-2.2)	1.4 (0.9-1.9)
2	4.8 (2.6-7.9)	4.1 (2.2-6.9)	3.7 (2.0-6.4)	3.2 (1.7-5.6)	2.8 (1.5-4.9)	2.5 (1.3-4.3)	2.1 (1.1-3.8)
3	7.8 (3.9-13)	6.5 (3.1-11)	5.7 (2.7-10)	5.0 (2.4-9.2)	4.3 (2.0-8.0)	3.8 (1.8-7.0)	3.3 (1.5-6.1)
4	12 (6.7-19)	10 (5.5-16)	8.7 (4.6-14)	7.5 (4.0-12)	6.5 (3.4-11)	5.7 (3.0-9.5)	4.9 (2.6-8.3)
5	19 (12-24)	15 (9.7-20)	13 (8.6-17)	11 (7.5-15)	9.8 (6.5-13)	8.5 (5.7-11)	7.4 (5.0-10.0)
6	29	23	19	17	14	12	11

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.5	2.2	2.0	1.8	1.5	1.3	1.2
1	4.1 (2.9-6.0)	3.5 (2.4-4.9)	3.2 (2.2-4.3)	2.7 (1.9-3.7)	2.4 (1.6-3.2)	2.1 (1.4-2.8)	1.8 (1.2-2.4)
2	6.7 (3.9-11)	5.6 (3.1-8.9)	4.9 (2.7-8.2)	4.3 (2.3-7.1)	3.7 (2.0-6.2)	3.2 (1.7-5.4)	2.8 (1.5-4.8)
3	11 (5.8-18)	8.7 (4.5-15)	7.5 (3.8-13)	6.5 (3.2-12)	5.6 (2.8-10)	4.9 (2.4-8.9)	4.2 (2.1-7.8)
4	17 (9.6-25)	13 (7.9-21)	11 (6.5-18)	9.8 (5.5-16)	8.5 (4.7-14)	7.4 (4.0-12)	6.4 (3.5-11)
5	26 (17-32)	20 (13-26)	17 (12-22)	15 (10-19)	13 (8.7-17)	11 (7.5-15)	9.5 (6.5-13)
6	39	30	25	21	19	16	14

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.7	3.1	2.7	2.4	2.1	1.8	1.5
1	6.1 (4.5-8.5)	4.9 (3.5-6.7)	4.3 (3.0-5.7)	3.7 (2.6-4.9)	3.2 (2.2-4.3)	2.8 (1.9-3.7)	2.4 (1.7-3.2)
2	9.8 (6.0-15)	7.8 (4.6-12)	6.7 (3.8-11)	5.7 (3.2-9.2)	4.9 (2.8-8.0)	4.3 (2.4-7.0)	3.7 (2.0-6.1)
3	15 (9.3-24)	12 (6.8-20)	10 (5.4-17)	8.8 (4.6-15)	7.5 (3.9-13)	6.5 (3.3-11)	5.6 (2.9-9.9)
4	24 (14-34)	18 (11-27)	15 (9.5-24)	13 (8.0-20)	11 (6.8-18)	9.8 (5.7-16)	8.4 (4.9-14)
5	36 (25-43)	28 (19-34)	23 (16-29)	19 (14-25)	17 (12-22)	14 (10-19)	12 (8.9-16)
6	51	40	33	28	24	21	18

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.7	4.6	4.0	3.4	2.9	2.5	2.2
1	9.2 (7.0-12)	7.3 (5.4-9.5)	6.2 (4.4-8.0)	5.3 (3.8-6.8)	4.5 (3.2-5.9)	3.9 (2.8-5.0)	3.4 (2.4-4.3)
2	15 (9.6-21)	11 (7.1-16)	9.5 (5.7-14)	8.1 (4.8-12)	7.0 (4.1-11)	6.0 (3.5-9.4)	5.1 (2.9-8.2)
3	22 (15-32)	17 (11-26)	14 (8.3-23)	12 (7.0-20)	11 (5.9-17)	9.0 (5.0-15)	7.8 (4.2-13)
4	33 (22-44)	26 (17-36)	21 (14-31)	18 (12-27)	16 (10-24)	13 (8.5-21)	12 (7.2-18)
5	47 (36-54)	37 (28-45)	31 (23-38)	26 (20-33)	23 (17-29)	20 (15-25)	17 (12-22)
6	62	51	43	37	32	28	24

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.2	7.4	6.3	5.4	4.6	3.9	3.4
1	15 (11-18)	11 (8.6-14)	9.4 (7.1-12)	8.0 (6.0-10)	6.8 (5.1-8.7)	5.8 (4.3-7.5)	5.0 (3.6-6.4)
2	23 (15-30)	17 (12-24)	14 (9.1-19)	12 (7.7-17)	10 (6.5-14)	8.6 (5.4-12)	7.3 (4.6-10)
3	34 (24-46)	26 (18-38)	21 (13-31)	18 (11-27)	15 (9.4-23)	13 (7.9-19)	11 (6.7-17)
4	48 (37-62)	39 (29-52)	31 (23-43)	26 (19-37)	22 (16-32)	19 (13-27)	16 (11-23)
5	64 (58-72)	54 (48-63)	44 (38-53)	38 (32-46)	32 (27-40)	28 (22-34)	23 (19-29)
6	76	70	60	53	46	39	34

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	14	12	9.9	8.4	7.1	6.1	5.2
1	23 (17-32)	18 (14-24)	15 (11-18)	13 (9.4-15)	11 (7.9-13)	8.9 (6.6-11)	7.5 (5.6-9.3)
2	35 (23-49)	28 (18-39)	23 (15-30)	19 (12-25)	16 (10-21)	13 (8.5-18)	11 (7.1-15)
3	49 (33-64)	41 (27-56)	33 (22-47)	28 (18-40)	24 (15-34)	20 (12-29)	17 (10-24)
4	62 (46-74)	56 (40-70)	48 (34-62)	41 (28-55)	35 (24-47)	29 (20-41)	25 (17-35)
5	73 (62-80)	70 (58-78)	63 (51-72)	56 (45-66)	49 (38-58)	42 (33-51)	36 (28-44)
6	81	80	77	71	65	57	50

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	19	17	14	12	10	8.5	7.1
1	29 (22-42)	25 (19-35)	21 (16-27)	18 (13-22)	15 (11-19)	12 (9.2-15)	10 (7.6-12)
2	41 (29-56)	36 (25-49)	31 (21-41)	26 (17-35)	22 (14-29)	18 (12-24)	15 (9.9-20)
3	53 (38-67)	49 (35-62)	43 (31-56)	37 (26-49)	31 (21-42)	26 (18-35)	22 (15-30)
4	64 (50-75)	61 (47-72)	57 (44-69)	50 (37-62)	43 (31-55)	37 (26-48)	31 (22-42)
5	73 (62-79)	72 (60-78)	69 (57-77)	63 (51-71)	56 (44-65)	50 (38-59)	43 (33-52)
6	80	79	78	74	68	62	55

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	22	19	17	14	12	10	8.4
1	32 (24-46)	28 (21-40)	25 (19-33)	21 (16-28)	18 (13-23)	15 (11-19)	12 (8.8-15)
2	43 (32-59)	40 (28-54)	36 (25-47)	30 (20-40)	25 (17-34)	21 (14-28)	18 (11-24)
3	55 (40-69)	52 (37-66)	48 (34-61)	41 (29-54)	35 (24-47)	30 (20-40)	25 (16-34)
4	66 (51-76)	63 (49-74)	60 (47-71)	54 (40-66)	47 (34-59)	41 (29-52)	35 (24-46)
5	74 (63-79)	73 (61-79)	71 (60-78)	66 (53-73)	59 (47-68)	53 (40-62)	46 (35-55)
6	78	79	79	75	70	64	58

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	20	18	17	14	12	9.9	8.3
1	29 (21-42)	26 (19-37)	25 (18-33)	21 (15-27)	17 (12-22)	14 (10-18)	12 (8.2-15)
2	40 (28-55)	37 (26-51)	34 (24-46)	29 (20-39)	24 (16-33)	20 (13-28)	17 (11-23)
3	51 (37-65)	48 (34-62)	46 (32-59)	39 (26-52)	33 (22-45)	28 (18-39)	23 (15-33)
4	62 (47-72)	60 (45-71)	57 (44-68)	51 (37-62)	44 (31-56)	38 (26-49)	32 (21-42)
5	69 (59-74)	69 (57-75)	68 (56-75)	62 (49-70)	56 (43-64)	49 (37-58)	43 (31-52)
6	72	75	76	71	66	60	54