

France - 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 France. 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	2.7	2.4	2.3	2.0	1.7	1.5	1.3
1	4.4 (3.0-6.5)	3.8 (2.6-5.5)	3.5 (2.4-4.9)	3.1 (2.1-4.3)	2.7 (1.8-3.7)	2.4 (1.6-3.2)	2.1 (1.4-2.8)
2	7.1 (3.9-12)	6.1 (3.3-10)	5.5 (2.9-9.4)	4.8 (2.5-8.2)	4.2 (2.2-7.2)	3.6 (1.9-6.3)	3.2 (1.7-5.5)
3	11 (5.7-19)	9.4 (4.6-17)	8.4 (4.0-15)	7.3 (3.5-13)	6.4 (3.0-12)	5.5 (2.6-10)	4.8 (2.3-9.0)
4	18 (9.7-27)	14 (8.1-23)	13 (6.8-20)	11 (5.9-18)	9.6 (5.1-16)	8.3 (4.4-14)	7.2 (3.8-12)
5	27 (17-34)	22 (14-28)	19 (13-25)	16 (11-22)	14 (9.5-19)	12 (8.3-17)	11 (7.3-14)
6	40	32	27	24	21	18	16

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.4	3.0	2.7	2.4	2.1	1.8	1.6
1	5.5 (3.9-8.0)	4.7 (3.3-6.6)	4.3 (2.9-5.8)	3.7 (2.6-5.1)	3.2 (2.2-4.4)	2.8 (1.9-3.8)	2.5 (1.7-3.3)
2	8.9 (5.1-14)	7.4 (4.2-12)	6.6 (3.6-11)	5.8 (3.1-9.6)	5.0 (2.7-8.4)	4.4 (2.3-7.4)	3.8 (2.0-6.5)
3	14 (7.7-23)	12 (6.0-20)	10 (5.1-18)	8.8 (4.4-16)	7.6 (3.8-14)	6.6 (3.2-12)	5.8 (2.8-10)
4	22 (13-32)	18 (11-27)	15 (8.6-24)	13 (7.4-21)	11 (6.4-18)	9.9 (5.5-16)	8.6 (4.7-14)
5	33 (22-40)	26 (18-33)	22 (15-29)	19 (13-25)	17 (12-22)	15 (10-19)	13 (8.8-17)
6	48	38	32	28	24	21	18

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.3	3.6	3.2	2.8	2.4	2.1	1.8
1	7.0 (5.1-9.7)	5.7 (4.1-7.8)	5.0 (3.5-6.7)	4.4 (3.0-5.8)	3.8 (2.6-5.0)	3.3 (2.3-4.3)	2.8 (2.0-3.8)
2	11 (6.8-17)	9.0 (5.3-14)	7.8 (4.4-12)	6.7 (3.8-11)	5.8 (3.2-9.5)	5.0 (2.8-8.3)	4.4 (2.4-7.2)
3	17 (10-27)	14 (7.8-22)	12 (6.3-20)	10 (5.4-18)	8.8 (4.6-15)	7.6 (3.9-13)	6.6 (3.4-12)
4	27 (16-37)	21 (13-31)	18 (11-27)	15 (9.2-24)	13 (7.8-21)	11 (6.7-18)	9.8 (5.7-16)
5	39 (28-47)	31 (22-38)	26 (19-33)	22 (16-29)	19 (14-25)	17 (12-22)	14 (10-19)
6	55	44	37	32	28	24	21

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.4	5.2	4.5	3.9	3.4	2.9	2.5
1	10 (7.7-13)	8.1 (6.0-11)	7.0 (5.0-9.0)	6.0 (4.3-7.8)	5.2 (3.7-6.7)	4.5 (3.2-5.8)	3.9 (2.7-5.0)
2	16 (10-23)	13 (7.8-18)	11 (6.4-16)	9.2 (5.4-14)	7.9 (4.6-12)	6.8 (3.9-11)	5.9 (3.4-9.5)
3	24 (16-34)	19 (12-29)	16 (9.2-26)	14 (7.8-23)	12 (6.6-20)	10 (5.6-17)	8.9 (4.8-15)
4	36 (24-47)	28 (19-40)	24 (16-35)	20 (13-30)	18 (11-27)	15 (9.6-23)	13 (8.1-20)
5	50 (39-58)	40 (31-48)	34 (26-42)	29 (22-37)	25 (19-32)	22 (16-28)	19 (14-25)
6	66	55	46	41	36	31	27

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	10	8.1	6.8	5.8	4.9	4.2	3.6
1	17 (13-20)	13 (9.6-15)	10 (7.7-13)	8.7 (6.5-11)	7.4 (5.5-9.4)	6.3 (4.7-8.0)	5.4 (4.0-6.9)
2	26 (18-34)	19 (13-26)	15 (10-21)	13 (8.4-18)	11 (7.1-16)	9.4 (6.0-13)	8.0 (5.0-11)
3	39 (27-53)	29 (20-42)	23 (15-34)	19 (12-29)	16 (10-25)	14 (8.7-21)	12 (7.3-18)
4	55 (44-69)	43 (33-57)	34 (25-46)	29 (21-40)	24 (18-35)	21 (15-30)	18 (12-26)
5	71 (66-79)	60 (53-69)	48 (41-57)	42 (35-50)	36 (30-43)	30 (25-37)	26 (21-32)
6	83	76	65	58	50	44	37

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	17	13	11	9.0	7.6	6.4	5.5
1	28 (21-40)	21 (16-29)	16 (12-20)	14 (10-17)	12 (8.7-14)	9.7 (7.3-12)	8.2 (6.1-9.8)
2	43 (29-58)	33 (22-46)	25 (16-35)	21 (14-29)	18 (11-24)	15 (9.5-20)	12 (7.9-16)
3	59 (43-74)	49 (32-65)	38 (24-53)	32 (20-46)	27 (17-39)	23 (14-33)	19 (12-28)
4	74 (59-83)	66 (50-79)	54 (39-69)	47 (33-62)	40 (28-54)	34 (23-47)	29 (20-40)
5	83 (74-88)	80 (68-86)	71 (58-80)	64 (51-73)	57 (44-66)	49 (38-58)	42 (32-51)
6	88	87	85	80	74	67	59

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	25	20	16	14	12	9.8	8.3
1	38 (29-52)	30 (23-41)	24 (19-31)	21 (16-26)	17 (13-22)	15 (11-18)	12 (9.1-15)
2	52 (39-68)	44 (31-59)	36 (25-48)	30 (21-41)	26 (17-35)	22 (14-29)	18 (12-24)
3	66 (52-78)	59 (44-73)	50 (36-64)	43 (30-57)	37 (25-49)	31 (21-42)	26 (18-36)
4	76 (64-84)	72 (59-82)	65 (51-77)	58 (44-71)	51 (38-64)	44 (32-57)	38 (27-50)
5	83 (75-87)	82 (72-87)	78 (67-84)	73 (60-80)	66 (53-74)	59 (47-68)	52 (40-61)
6	86	87	86	83	79	73	66

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	30	26	23	19	16	14	12
1	42 (33-57)	37 (29-49)	32 (25-41)	27 (21-34)	23 (18-29)	20 (15-24)	17 (12-20)
2	55 (42-70)	50 (37-64)	45 (32-56)	38 (27-49)	33 (23-42)	28 (19-36)	23 (16-30)
3	66 (53-78)	63 (49-75)	58 (44-70)	51 (38-64)	45 (32-57)	39 (27-50)	33 (23-43)
4	75 (64-83)	73 (61-82)	70 (58-80)	64 (51-75)	58 (45-69)	51 (38-63)	44 (32-56)
5	81 (74-84)	81 (72-85)	80 (70-85)	75 (65-81)	70 (58-77)	64 (52-72)	57 (45-66)
6	82	85	85	83	79	74	69

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	29	26	24	20	17	14	12
1	41 (32-56)	37 (29-50)	34 (26-43)	29 (22-36)	24 (18-30)	20 (15-25)	17 (12-21)
2	53 (41-68)	50 (37-64)	46 (33-57)	39 (28-50)	34 (23-43)	29 (19-37)	24 (16-31)
3	65 (51-76)	62 (48-74)	58 (44-71)	52 (38-64)	45 (32-57)	39 (27-50)	33 (23-44)
4	73 (62-81)	72 (60-80)	70 (57-79)	64 (51-74)	57 (44-69)	51 (38-63)	44 (32-56)
5	77 (71-80)	78 (70-82)	78 (69-83)	74 (64-80)	69 (57-76)	63 (51-71)	56 (45-65)
6	76	81	83	81	77	73	68