

Ireland - 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 Ireland. 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	3.3	2.9	2.7	2.4	2.1	1.8	1.6
1	5.4 (3.8-8.2)	4.7 (3.2-6.7)	4.3 (2.9-5.9)	3.7 (2.5-5.1)	3.2 (2.2-4.5)	2.8 (1.9-3.9)	2.5 (1.7-3.4)
2	8.8 (4.9-14)	7.4 (4.0-12)	6.6 (3.5-11)	5.8 (3.1-9.8)	5.0 (2.7-8.6)	4.4 (2.3-7.5)	3.8 (2.0-6.6)
3	14 (7.2-23)	12 (5.7-20)	10 (4.9-18)	8.8 (4.2-16)	7.7 (3.7-14)	6.7 (3.2-12)	5.8 (2.7-11)
4	22 (12-33)	18 (10-27)	15 (8.4-24)	13 (7.2-21)	12 (6.2-19)	10 (5.3-16)	8.7 (4.6-14)
5	33 (21-41)	27 (17-34)	22 (15-29)	20 (13-26)	17 (11-23)	15 (10-20)	13 (8.7-17)
6	49	39	32	28	25	22	19

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.9	4.2	3.8	3.3	2.9	2.5	2.2
1	7.9 (5.7-12)	6.7 (4.7-9.4)	6.0 (4.1-8.2)	5.2 (3.6-7.1)	4.5 (3.1-6.1)	3.9 (2.7-5.3)	3.4 (2.3-4.6)
2	13 (7.5-20)	10 (5.9-17)	9.3 (5.1-15)	8.0 (4.4-13)	7.0 (3.8-12)	6.1 (3.3-10)	5.3 (2.9-8.9)
3	20 (11-31)	16 (8.6-27)	14 (7.2-24)	12 (6.2-21)	11 (5.3-19)	9.2 (4.6-16)	8.0 (3.9-14)
4	30 (18-43)	24 (15-36)	21 (12-32)	18 (10-28)	16 (9.0-25)	14 (7.7-22)	12 (6.6-19)
5	44 (30-53)	36 (24-44)	30 (21-38)	26 (18-34)	23 (16-30)	20 (14-26)	17 (12-23)
6	62	50	42	37	33	29	25

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.3	6.2	5.6	4.9	4.2	3.7	3.2
1	12 (8.7-16)	9.8 (7.0-13)	8.7 (6.1-11)	7.5 (5.3-9.9)	6.5 (4.5-8.6)	5.7 (3.9-7.5)	4.9 (3.4-6.5)
2	18 (12-28)	15 (9.0-23)	13 (7.6-21)	11 (6.5-18)	9.9 (5.6-16)	8.6 (4.8-14)	7.5 (4.2-12)
3	28 (17-41)	23 (13-36)	20 (11-32)	17 (9.2-29)	15 (7.9-25)	13 (6.7-22)	11 (5.8-19)
4	41 (26-55)	33 (22-47)	29 (18-42)	25 (15-37)	22 (13-33)	19 (11-29)	16 (9.7-26)
5	57 (43-66)	47 (35-56)	40 (30-50)	35 (26-44)	31 (23-39)	27 (20-35)	24 (17-31)
6	73	63	54	49	43	38	33

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	8.9	7.9	6.8	5.9	5.1	4.4
1	17 (13-22)	14 (10-18)	12 (8.6-15)	10 (7.4-13)	9.0 (6.4-11)	7.8 (5.5-10)	6.7 (4.7-8.6)
2	25 (17-36)	21 (13-29)	18 (11-27)	16 (9.3-24)	13 (7.9-21)	12 (6.8-18)	10 (5.8-16)
3	37 (26-50)	30 (19-44)	26 (16-41)	23 (13-36)	20 (11-32)	17 (9.6-28)	15 (8.2-25)
4	51 (37-65)	43 (30-57)	37 (26-52)	32 (22-47)	28 (19-42)	25 (16-37)	22 (14-33)
5	66 (55-74)	57 (46-67)	50 (40-60)	45 (35-55)	39 (31-49)	35 (27-44)	30 (23-39)
6	79	72	65	59	53	47	42

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	16	13	11	9.4	8.1	7.0	6.0
1	24 (19-29)	19 (15-24)	16 (12-20)	14 (10-17)	12 (8.9-15)	10 (7.6-13)	8.7 (6.5-11)
2	35 (25-46)	28 (19-37)	24 (16-32)	20 (13-28)	17 (11-24)	15 (9.5-21)	13 (8.1-18)
3	50 (37-63)	41 (28-55)	34 (23-48)	29 (19-42)	25 (16-36)	21 (14-32)	18 (12-27)
4	65 (53-76)	56 (44-70)	47 (36-62)	41 (31-55)	36 (26-49)	31 (22-43)	26 (19-37)
5	77 (72-83)	71 (65-79)	62 (55-72)	56 (48-65)	49 (42-58)	43 (36-52)	37 (30-45)
6	84	82	77	71	64	57	51

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	22	18	15	13	11	9.3	7.9
1	34 (26-46)	27 (21-36)	23 (17-27)	19 (14-23)	16 (12-19)	14 (10-16)	12 (8.6-14)
2	48 (34-64)	40 (28-54)	33 (22-44)	28 (19-37)	24 (16-32)	20 (13-27)	17 (11-22)
3	62 (47-76)	56 (40-70)	47 (32-62)	41 (27-55)	35 (23-48)	30 (19-41)	25 (16-35)
4	73 (60-83)	70 (55-81)	63 (48-76)	56 (41-70)	49 (35-63)	42 (30-56)	36 (25-49)
5	81 (73-86)	80 (71-85)	77 (66-84)	71 (60-79)	64 (53-73)	57 (46-66)	50 (40-59)
6	86	86	85	82	77	72	65

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	27	23	19	16	13	11	9.5
1	39 (31-54)	34 (26-46)	28 (22-36)	24 (18-30)	20 (15-25)	17 (12-21)	14 (10-17)
2	52 (40-68)	47 (34-61)	40 (28-53)	34 (24-46)	29 (20-39)	24 (16-33)	20 (14-27)
3	64 (50-77)	60 (46-73)	54 (40-68)	47 (34-61)	41 (29-53)	35 (24-46)	29 (20-39)
4	73 (61-82)	72 (59-80)	68 (55-78)	61 (48-73)	54 (41-67)	48 (35-60)	41 (30-53)
5	80 (72-84)	79 (70-84)	78 (68-84)	73 (62-80)	67 (55-75)	61 (49-70)	54 (42-63)
6	83	84	84	81	77	73	67

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	28	24	22	18	15	13	11
1	39 (31-55)	35 (27-48)	31 (24-40)	26 (20-34)	22 (16-28)	18 (14-23)	15 (11-19)
2	52 (40-68)	48 (35-63)	43 (31-55)	37 (26-48)	31 (21-41)	26 (18-34)	22 (15-29)
3	64 (50-76)	60 (46-73)	56 (42-69)	49 (36-62)	43 (30-55)	36 (25-48)	31 (21-41)
4	73 (61-81)	71 (58-80)	68 (55-78)	62 (48-73)	55 (42-67)	49 (36-61)	42 (30-54)
5	78 (71-81)	79 (70-83)	77 (67-83)	73 (61-79)	67 (55-75)	61 (48-70)	54 (42-63)
6	78	82	83	81	77	72	66

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	23	21	19	16	14	11	9.5
1	33 (25-47)	30 (23-41)	28 (21-36)	23 (17-30)	19 (14-25)	16 (12-20)	13 (9.7-17)
2	45 (33-61)	42 (30-56)	38 (27-49)	32 (22-42)	27 (18-36)	23 (15-30)	19 (13-26)
3	57 (42-70)	54 (39-67)	50 (36-63)	44 (31-56)	38 (26-49)	32 (21-42)	27 (18-36)
4	66 (53-76)	65 (51-75)	62 (49-72)	56 (42-67)	49 (36-61)	43 (30-54)	37 (25-48)
5	72 (64-76)	73 (63-78)	72 (61-78)	67 (55-74)	61 (49-69)	54 (43-63)	48 (37-57)
6	73	77	79	75	71	66	60