

The UK - 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 the UK. 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	3.8	3.5	3.4	3.0	2.6	2.3	2.0
1	6.1 (4.2-9.0)	5.6 (3.8-7.8)	5.3 (3.6-7.2)	4.6 (3.1-6.3)	4.1 (2.7-5.5)	3.6 (2.4-4.8)	3.1 (2.1-4.2)
2	9.7 (5.3-16)	8.7 (4.7-15)	8.1 (4.3-14)	7.1 (3.8-12)	6.2 (3.3-11)	5.4 (2.9-9.5)	4.8 (2.5-8.3)
3	15 (7.7-26)	13 (6.5-23)	12 (5.9-22)	11 (5.1-19)	9.4 (4.5-17)	8.2 (3.9-15)	7.2 (3.4-13)
4	23 (13-35)	20 (11-31)	18 (9.8-29)	16 (8.5-25)	14 (7.4-23)	12 (6.4-20)	11 (5.6-18)
5	34 (22-42)	29 (19-37)	26 (18-34)	23 (16-30)	20 (14-27)	18 (12-24)	15 (11-21)
6	48	41	36	32	28	25	22

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.3	4.8	4.5	3.9	3.4	3.0	2.6
1	8.4 (5.9-12)	7.5 (5.2-10)	7.0 (4.8-9.4)	6.1 (4.2-8.1)	5.3 (3.6-7.1)	4.7 (3.2-6.2)	4.1 (2.8-5.4)
2	13 (7.6-20)	12 (6.4-19)	11 (5.8-18)	9.3 (5.1-15)	8.1 (4.4-14)	7.1 (3.8-12)	6.2 (3.3-11)
3	20 (11-33)	17 (9.1-29)	16 (8.0-27)	14 (6.9-24)	12 (6.0-21)	11 (5.2-19)	9.3 (4.5-17)
4	30 (18-44)	26 (15-39)	23 (13-36)	20 (11-32)	18 (9.9-28)	16 (8.6-25)	14 (7.4-22)
5	43 (30-53)	37 (26-46)	33 (24-42)	29 (21-37)	25 (18-33)	22 (16-29)	20 (14-26)
6	59	51	45	40	36	31	28

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.2	6.4	5.9	5.2	4.5	3.9	3.4
1	11 (8.3-16)	9.9 (7.0-13)	9.1 (6.4-12)	7.9 (5.5-10)	6.9 (4.8-9.1)	6.0 (4.1-7.9)	5.3 (3.6-6.9)
2	18 (11-26)	15 (8.9-23)	14 (7.8-22)	12 (6.7-19)	10 (5.8-17)	9.1 (5.0-15)	7.9 (4.4-13)
3	27 (16-40)	23 (13-36)	20 (11-33)	18 (9.4-30)	15 (8.1-26)	13 (7.0-23)	12 (6.0-21)
4	38 (25-53)	33 (22-47)	29 (18-43)	25 (15-39)	22 (13-34)	20 (11-30)	17 (9.9-27)
5	53 (40-62)	45 (34-55)	40 (30-50)	36 (27-45)	31 (23-40)	28 (20-36)	24 (18-32)
6	69	60	54	48	43	38	34

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	10	9.1	8.4	7.3	6.4	5.5	4.8
1	16 (12-21)	14 (10-18)	13 (9.1-16)	11 (7.8-14)	9.6 (6.8-12)	8.4 (5.9-11)	7.3 (5.1-9.4)
2	24 (16-33)	21 (13-30)	19 (11-29)	16 (9.6-26)	14 (8.3-23)	12 (7.2-20)	11 (6.2-18)
3	35 (23-48)	30 (19-45)	27 (16-43)	24 (13-38)	21 (12-34)	18 (9.9-30)	16 (8.6-27)
4	48 (35-62)	42 (30-57)	38 (25-54)	33 (22-48)	29 (19-43)	26 (16-39)	23 (14-35)
5	62 (51-71)	56 (45-65)	51 (40-61)	45 (36-56)	40 (31-50)	36 (28-45)	31 (24-40)
6	75	70	65	59	53	48	42

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	14	12	11	9.4	8.1	7.0	6.1
1	21 (16-26)	18 (13-22)	16 (12-20)	14 (10-17)	12 (8.7-15)	10 (7.5-13)	8.8 (6.4-11)
2	31 (21-41)	26 (17-35)	23 (15-31)	20 (13-27)	17 (11-23)	15 (9.3-20)	13 (7.9-18)
3	44 (31-57)	37 (25-51)	32 (21-45)	28 (18-40)	24 (15-35)	21 (13-31)	18 (11-27)
4	58 (46-71)	51 (39-65)	44 (33-58)	38 (28-52)	33 (24-46)	29 (21-41)	25 (18-36)
5	71 (66-79)	65 (58-74)	58 (50-68)	52 (44-61)	46 (38-55)	40 (33-49)	35 (28-43)
6	81	78	73	66	60	53	47

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	18	15	13	11	9.7	8.3	7.1
1	27 (20-37)	23 (17-29)	19 (15-23)	16 (12-20)	14 (10-17)	12 (8.9-15)	10 (7.5-13)
2	40 (27-54)	33 (22-45)	28 (19-37)	24 (16-31)	20 (13-27)	17 (11-22)	15 (9.5-19)
3	54 (38-69)	47 (32-61)	40 (27-54)	34 (23-47)	29 (19-40)	25 (16-35)	21 (14-29)
4	67 (51-77)	62 (46-74)	54 (40-68)	48 (34-61)	41 (29-54)	35 (25-48)	30 (21-41)
5	77 (66-83)	74 (63-81)	69 (59-77)	62 (52-72)	55 (46-65)	49 (40-58)	42 (34-51)
6	83	83	81	76	70	63	56

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	22	19	17	15	12	10	8.8
1	32 (24-44)	28 (21-38)	25 (19-31)	21 (16-26)	18 (13-21)	15 (11-18)	13 (9.2-15)
2	44 (32-59)	39 (28-52)	35 (24-45)	30 (20-38)	25 (17-32)	21 (14-27)	18 (12-23)
3	56 (41-69)	52 (38-65)	47 (34-59)	41 (29-52)	35 (24-45)	30 (20-39)	25 (17-33)
4	67 (53-77)	64 (51-74)	60 (47-72)	54 (41-66)	47 (35-59)	41 (29-52)	35 (25-46)
5	76 (65-81)	74 (63-80)	72 (61-79)	66 (55-74)	60 (48-68)	53 (42-62)	46 (36-55)
6	81	81	80	76	71	65	58

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	25	23	22	18	15	13	11
1	35 (27-49)	33 (25-45)	31 (23-39)	26 (19-33)	22 (16-28)	18 (13-23)	15 (11-19)
2	47 (34-62)	44 (32-58)	42 (30-53)	36 (25-46)	30 (21-40)	26 (17-34)	21 (14-29)
3	58 (43-71)	55 (41-69)	53 (39-66)	47 (33-60)	41 (28-53)	35 (23-46)	29 (19-40)
4	68 (55-77)	66 (53-76)	64 (51-74)	58 (45-69)	52 (39-63)	45 (33-57)	39 (28-50)
5	75 (66-79)	75 (64-80)	73 (63-80)	68 (57-76)	63 (51-71)	56 (45-65)	50 (39-59)
6	77	80	80	77	72	67	61

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	26	24	22	19	16	13	11
1	37 (29-52)	34 (26-47)	32 (24-42)	27 (20-35)	22 (16-29)	19 (13-24)	15 (11-20)
2	49 (37-64)	46 (34-61)	43 (31-56)	37 (26-48)	31 (21-42)	26 (17-35)	22 (14-30)
3	60 (46-72)	57 (43-71)	55 (40-68)	48 (34-61)	42 (29-55)	36 (24-48)	30 (20-41)
4	68 (57-77)	67 (55-77)	66 (53-75)	60 (46-70)	53 (40-65)	47 (34-58)	41 (28-52)
5	71 (66-75)	74 (66-78)	74 (64-80)	70 (59-76)	64 (52-72)	58 (46-67)	52 (40-61)
6	69	76	79	77	73	69	63