

Norway - 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 Norway. 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	4.2	3.7	3.5	3.1	2.7	2.3	2.0
1	6.8 (4.7-10)	5.9 (4.1-8.5)	5.5 (3.7-7.6)	4.8 (3.2-6.6)	4.2 (2.8-5.8)	3.7 (2.5-5.0)	3.2 (2.2-4.4)
2	11 (6.1-18)	9.3 (5.1-15)	8.5 (4.5-14)	7.4 (3.9-13)	6.4 (3.4-11)	5.6 (3.0-9.7)	4.9 (2.6-8.5)
3	17 (8.9-29)	14 (7.2-25)	13 (6.3-23)	11 (5.4-20)	9.8 (4.7-18)	8.5 (4.1-16)	7.5 (3.5-14)
4	27 (15-39)	22 (12-33)	19 (11-30)	17 (9.1-27)	15 (7.9-23)	13 (6.8-21)	11 (5.9-18)
5	39 (25-48)	32 (21-40)	28 (19-36)	24 (17-32)	21 (15-28)	19 (13-25)	16 (11-22)
6	56	46	39	35	30	27	23

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.0	5.3	4.8	4.2	3.7	3.2	2.8
1	9.8 (7.0-14)	8.3 (5.8-12)	7.5 (5.2-10)	6.6 (4.5-8.9)	5.7 (3.9-7.7)	5.0 (3.4-6.7)	4.3 (3.0-5.8)
2	16 (9.2-24)	13 (7.4-20)	12 (6.4-19)	10 (5.5-17)	8.7 (4.8-15)	7.6 (4.1-13)	6.6 (3.6-11)
3	24 (14-37)	20 (11-32)	17 (9.0-29)	15 (7.7-26)	13 (6.6-23)	11 (5.7-20)	10 (4.9-18)
4	36 (22-50)	29 (18-43)	25 (15-39)	22 (13-34)	19 (11-30)	17 (9.6-27)	15 (8.3-24)
5	51 (36-61)	42 (30-52)	36 (26-46)	32 (23-41)	28 (20-36)	24 (17-32)	21 (15-28)
6	69	58	50	44	39	35	30

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.0	7.5	6.8	5.9	5.1	4.4	3.9
1	14 (11-20)	12 (8.6-16)	10 (7.4-14)	9.1 (6.4-12)	7.9 (5.5-10)	6.8 (4.8-9.0)	6.0 (4.1-7.8)
2	22 (14-33)	18 (11-27)	16 (9.2-25)	14 (7.9-22)	12 (6.8-19)	10 (5.8-17)	9.0 (5.0-15)
3	33 (21-48)	27 (16-42)	23 (13-38)	20 (11-34)	18 (9.5-30)	15 (8.2-26)	13 (7.0-23)
4	48 (32-63)	39 (26-54)	34 (22-49)	29 (19-44)	26 (16-39)	23 (14-34)	20 (12-31)
5	64 (50-73)	54 (41-64)	47 (35-57)	41 (31-51)	36 (27-46)	32 (24-41)	28 (21-36)
6	80	70	62	56	50	44	39

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	10	9.0	7.8	6.7	5.8	5.0
1	20 (15-26)	16 (12-21)	14 (10-18)	12 (8.6-15)	10 (7.4-13)	8.9 (6.3-11)	7.7 (5.4-9.9)
2	30 (21-42)	24 (16-34)	21 (13-30)	18 (11-27)	15 (9.2-24)	13 (7.9-21)	12 (6.8-18)
3	43 (31-57)	35 (23-50)	30 (18-46)	26 (15-41)	23 (13-36)	20 (11-32)	17 (9.5-28)
4	58 (43-72)	49 (35-64)	42 (30-58)	37 (26-52)	32 (22-47)	28 (19-42)	25 (16-37)
5	73 (63-81)	64 (53-73)	56 (45-66)	50 (40-60)	45 (35-54)	39 (31-49)	35 (27-44)
6	85	79	71	65	59	53	47

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	18	14	12	10	8.8	7.6	6.5
1	27 (22-33)	22 (17-26)	18 (14-22)	15 (12-19)	13 (9.8-16)	11 (8.4-14)	9.6 (7.1-12)
2	41 (29-52)	32 (22-42)	26 (17-35)	22 (15-30)	19 (12-26)	16 (11-23)	14 (9.0-20)
3	56 (42-70)	46 (32-61)	37 (25-52)	32 (21-46)	28 (18-40)	24 (15-35)	20 (13-30)
4	72 (61-82)	62 (50-75)	52 (40-66)	45 (35-60)	39 (29-53)	34 (25-47)	29 (21-41)
5	83 (79-87)	77 (71-84)	68 (61-76)	61 (53-70)	54 (46-63)	47 (40-56)	41 (34-50)
6	88	87	82	76	70	63	56

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	24	19	16	14	12	9.9	8.4
1	37 (29-50)	29 (23-38)	24 (18-29)	20 (15-24)	17 (13-20)	15 (11-17)	12 (9.2-15)
2	52 (38-68)	43 (30-57)	35 (24-46)	30 (20-39)	25 (17-33)	21 (14-28)	18 (12-24)
3	67 (52-81)	59 (43-74)	50 (34-65)	43 (29-58)	37 (24-51)	32 (20-44)	27 (17-38)
4	78 (66-86)	74 (60-84)	66 (51-79)	59 (44-73)	52 (38-66)	45 (32-59)	39 (27-52)
5	85 (78-89)	84 (76-88)	80 (70-86)	74 (63-82)	68 (56-76)	61 (50-70)	54 (43-63)
6	88	89	88	85	81	76	69

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	29	25	21	18	15	13	11
1	42 (33-57)	36 (28-48)	30 (24-39)	26 (20-33)	22 (17-27)	18 (14-23)	15 (12-19)
2	56 (43-71)	50 (37-64)	43 (30-56)	37 (26-48)	31 (21-41)	27 (18-35)	22 (15-29)
3	67 (54-79)	63 (50-76)	57 (43-70)	50 (37-63)	44 (31-56)	38 (26-49)	32 (22-42)
4	76 (65-84)	74 (62-82)	70 (58-80)	64 (51-76)	57 (44-70)	51 (38-63)	44 (32-56)
5	82 (75-86)	82 (73-86)	80 (71-85)	76 (65-82)	70 (59-78)	64 (52-72)	57 (46-66)
6	85	86	86	83	80	75	70

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	31	28	26	22	18	15	13
1	43 (34-58)	40 (31-53)	36 (28-46)	31 (23-39)	26 (20-33)	22 (16-28)	18 (14-23)
2	55 (43-70)	52 (39-67)	48 (35-61)	42 (30-53)	36 (25-46)	31 (21-40)	26 (17-34)
3	66 (52-77)	64 (50-76)	61 (47-73)	54 (40-67)	48 (34-60)	41 (29-53)	36 (24-47)
4	74 (63-82)	73 (61-81)	71 (60-80)	66 (53-76)	60 (46-71)	53 (40-65)	47 (34-58)
5	79 (72-82)	80 (71-84)	79 (71-84)	75 (65-81)	70 (59-77)	65 (53-73)	58 (47-67)
6	79	83	84	82	78	74	69

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	29	27	26	22	18	15	13
1	41 (32-55)	38 (29-51)	36 (27-45)	30 (23-39)	26 (19-33)	22 (16-27)	18 (13-23)
2	53 (41-67)	50 (37-64)	47 (34-59)	41 (29-52)	35 (24-46)	30 (20-39)	25 (17-33)
3	63 (50-75)	61 (47-73)	59 (44-71)	52 (38-65)	46 (32-59)	40 (27-52)	34 (22-45)
4	71 (60-79)	70 (58-79)	69 (57-78)	63 (50-73)	57 (44-68)	51 (38-62)	44 (32-56)
5	74 (69-77)	76 (69-80)	77 (68-81)	73 (62-79)	68 (56-75)	62 (50-70)	56 (44-64)
6	70	78	81	79	76	71	66