

Norway - The probabilities of a major osteoporotic fracture in men

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	3.1	2.9	2.8	2.5	2.2	1.9	1.7
1	5.0 (3.4-7.5)	4.6 (3.1-6.6)	4.4 (3.0-6.1)	3.8 (2.6-5.3)	3.4 (2.2-4.6)	2.9 (2.0-4.0)	2.6 (1.7-3.5)
2	8.0 (4.4-13)	7.2 (3.9-12)	6.8 (3.6-12)	5.9 (3.1-10)	5.1 (2.7-8.9)	4.5 (2.4-7.9)	3.9 (2.1-6.9)
3	13 (6.4-21)	11 (5.4-19)	10 (4.9-18)	8.9 (4.3-16)	7.8 (3.7-14)	6.8 (3.2-12)	5.9 (2.8-11)
4	19 (11-29)	17 (9.1-26)	15 (8.1-24)	13 (7.0-21)	11 (6.0-19)	10 (5.2-17)	8.8 (4.5-15)
5	28 (18-36)	24 (16-32)	22 (15-29)	19 (13-26)	17 (11-22)	15 (10-20)	13 (8.7-17)
6	41	35	31	27	24	21	18

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.1	3.7	3.6	3.1	2.7	2.3	2.0
1	6.6 (4.6-9.6)	5.9 (4.1-8.2)	5.5 (3.8-7.5)	4.8 (3.3-6.5)	4.2 (2.8-5.6)	3.6 (2.4-4.9)	3.2 (2.1-4.3)
2	10 (6.0-16)	9.1 (5.1-15)	8.4 (4.6-14)	7.3 (4.0-12)	6.4 (3.4-11)	5.5 (3.0-9.4)	4.8 (2.6-8.3)
3	16 (8.9-26)	14 (7.3-23)	13 (6.4-22)	11 (5.5-19)	9.5 (4.8-17)	8.3 (4.1-15)	7.2 (3.5-13)
4	24 (15-35)	21 (12-31)	19 (11-29)	16 (9.1-26)	14 (7.8-23)	12 (6.7-20)	11 (5.7-17)
5	35 (23-44)	30 (21-38)	27 (19-35)	23 (16-31)	20 (14-27)	18 (12-24)	15 (11-21)
6	49	42	37	33	29	25	22

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.5	4.9	4.5	3.9	3.4	2.9	2.5
1	8.7 (6.3-12)	7.6 (5.4-10)	7.0 (4.8-9.3)	6.0 (4.2-8.0)	5.2 (3.6-6.9)	4.5 (3.1-6.0)	3.9 (2.7-5.2)
2	14 (8.3-20)	12 (6.9-18)	11 (6.0-17)	9.1 (5.2-15)	7.9 (4.4-13)	6.8 (3.8-11)	5.9 (3.3-9.9)
3	21 (13-30)	18 (10-28)	16 (8.6-26)	14 (7.3-23)	12 (6.2-20)	10 (5.3-18)	8.8 (4.5-15)
4	30 (19-42)	26 (17-37)	23 (14-35)	20 (12-30)	17 (10-27)	15 (8.6-23)	13 (7.3-20)
5	42 (30-51)	36 (26-45)	32 (24-41)	28 (20-36)	25 (18-32)	21 (15-28)	18 (13-25)
6	55	49	44	39	34	30	26

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.0	6.1	5.5	4.7	4.0	3.5	3.0
1	11 (8.1-15)	9.4 (6.8-12)	8.4 (6.0-11)	7.2 (5.1-9.4)	6.2 (4.3-8.0)	5.3 (3.7-6.9)	4.5 (3.1-5.9)
2	17 (11-23)	14 (8.9-21)	13 (7.6-19)	11 (6.4-17)	9.3 (5.4-15)	7.9 (4.6-13)	6.8 (3.9-11)
3	24 (17-33)	21 (13-31)	19 (11-29)	16 (9.3-25)	14 (7.8-22)	12 (6.6-19)	10 (5.5-17)
4	34 (24-45)	30 (21-42)	27 (18-39)	23 (15-34)	20 (13-30)	17 (11-26)	15 (8.9-23)
5	46 (35-55)	41 (31-50)	37 (28-46)	32 (24-41)	28 (21-36)	24 (18-31)	21 (15-27)
6	58	54	49	43	38	33	29

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.7	7.5	6.6	5.6	4.8	4.0	3.4
1	13 (10-17)	11 (8.4-14)	9.9 (7.3-13)	8.3 (6.1-11)	7.0 (5.1-9.0)	5.9 (4.3-7.7)	5.0 (3.6-6.5)
2	20 (14-29)	17 (11-24)	15 (9.5-20)	12 (7.9-17)	10 (6.6-15)	8.7 (5.5-12)	7.3 (4.6-10)
3	30 (20-41)	25 (17-35)	22 (14-31)	18 (12-27)	15 (9.7-22)	13 (8.0-19)	11 (6.7-16)
4	41 (30-53)	36 (26-48)	31 (22-43)	26 (18-37)	22 (15-32)	19 (13-27)	16 (10-23)
5	54 (47-63)	49 (42-58)	43 (37-52)	37 (31-46)	32 (26-39)	27 (21-34)	22 (18-29)
6	65	62	57	50	43	37	32

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	9.2	8.1	6.8	5.6	4.7	3.9
1	17 (12-26)	15 (10-21)	12 (9.0-16)	10 (7.4-13)	8.5 (6.1-11)	7.0 (5.0-8.6)	5.8 (4.1-7.1)
2	26 (17-39)	22 (14-33)	19 (12-27)	16 (9.8-22)	13 (8.0-18)	11 (6.6-15)	8.7 (5.4-12)
3	37 (23-53)	33 (21-47)	28 (18-40)	23 (15-33)	19 (12-28)	16 (9.9-23)	13 (8.1-19)
4	50 (33-63)	46 (30-59)	41 (27-54)	34 (22-47)	29 (18-40)	24 (15-34)	19 (12-28)
5	62 (48-70)	59 (45-68)	54 (41-64)	47 (35-57)	41 (30-50)	34 (25-43)	29 (21-36)
6	72	70	67	61	54	47	40

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	12	11	9.9	8.1	6.6	5.4	4.5
1	19 (14-30)	17 (12-26)	15 (11-21)	12 (8.8-17)	10 (7.1-14)	8.2 (5.8-11)	6.7 (4.7-8.8)
2	28 (19-42)	25 (17-38)	22 (15-32)	18 (12-26)	15 (9.6-21)	12 (7.7-17)	9.9 (6.2-14)
3	39 (25-53)	36 (23-49)	32 (21-44)	27 (17-37)	22 (14-31)	18 (11-26)	15 (8.9-21)
4	50 (34-62)	47 (32-59)	44 (31-56)	37 (25-49)	31 (21-42)	26 (17-35)	21 (14-30)
5	61 (47-69)	59 (44-67)	56 (42-65)	49 (36-58)	42 (30-52)	36 (25-45)	30 (21-38)
6	70	69	67	61	54	48	41

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	14	13	12	9.5	7.7	6.2	5.1
1	21 (15-33)	19 (14-29)	18 (13-25)	14 (10-21)	12 (8.1-17)	9.4 (6.5-13)	7.5 (5.2-11)
2	31 (20-46)	28 (19-42)	26 (17-37)	21 (14-31)	17 (11-25)	14 (8.8-20)	11 (7.0-16)
3	42 (27-56)	39 (25-53)	36 (23-49)	30 (19-42)	25 (15-36)	20 (12-30)	17 (9.6-24)
4	53 (37-65)	50 (35-62)	47 (33-59)	41 (27-52)	35 (22-45)	29 (18-39)	24 (15-32)
5	63 (49-70)	61 (47-69)	59 (45-67)	52 (38-61)	46 (32-55)	39 (27-48)	33 (22-41)
6	70	70	69	63	57	50	44

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	14	13	12	9.7	7.8	6.3	5.1
1	22 (16-35)	20 (14-30)	18 (13-26)	15 (10-21)	12 (8.2-17)	9.5 (6.6-14)	7.7 (5.2-11)
2	32 (22-48)	29 (20-43)	26 (17-38)	22 (14-32)	18 (11-26)	14 (8.9-21)	11 (7.1-17)
3	44 (30-58)	40 (26-54)	37 (24-50)	31 (19-43)	26 (16-37)	21 (12-30)	17 (9.8-25)
4	54 (39-66)	52 (36-64)	48 (34-60)	42 (28-53)	36 (23-46)	30 (19-40)	24 (15-33)
5	63 (51-68)	62 (49-69)	60 (46-68)	54 (39-62)	47 (33-56)	40 (28-49)	34 (23-42)
6	66	69	69	65	59	52	45