

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 the T-score for femoral neck BMD, 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.

Note that the BMI is set at 24 kg/m².

Age = 50 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	26	17	11	7.5	5.6	4.3	3.6	3.0	2.7	2.6	2.5
1	38 (32-47)	25 (22-31)	17 (15-21)	11 (9.7-14)	8.4 (6.6-11)	6.6 (4.8-8.2)	5.4 (3.8-7.0)	4.6 (3.1-6.1)	4.1 (2.7-5.6)	3.9 (2.5-5.3)	3.7 (2.4-5.1)
2	53 (41-67)	36 (29-49)	24 (20-34)	17 (13-24)	13 (8.8-18)	9.8 (6.2-15)	8.0 (4.7-13)	6.7 (3.8-11)	6.0 (3.2-10)	5.7 (3.0-9.8)	5.4 (2.8-9.4)
3	68 (53-81)	50 (37-63)	35 (26-44)	25 (18-35)	18 (12-28)	14 (8.3-23)	12 (6.2-20)	9.7 (4.9-18)	8.7 (4.2-16)	8.2 (3.9-15)	7.8 (3.6-15)
4	81 (67-89)	64 (48-76)	48 (34-57)	35 (24-43)	26 (17-35)	20 (13-29)	16 (10-25)	14 (8.1-22)	12 (6.8-20)	12 (6.2-20)	11 (5.8-19)
5	89 (84-93)	78 (68-85)	62 (51-68)	47 (37-52)	36 (28-42)	28 (22-35)	23 (17-30)	19 (15-26)	17 (13-24)	16 (11-23)	15 (11-22)
6	94	88	75	60	47	37	31	26	23	22	21

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

Age = 55 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	29	19	13	9.2	6.8	5.3	4.3	3.6	3.2	3.0	2.8
1	41 (36-48)	28 (26-34)	19 (17-23)	14 (12-17)	10 (8.1-12)	7.9 (5.9-9.7)	6.4 (4.6-8.3)	5.4 (3.7-7.1)	4.8 (3.2-6.6)	4.5 (2.9-6.2)	4.2 (2.7-5.9)
2	55 (45-68)	39 (32-51)	28 (23-37)	20 (16-27)	15 (11-21)	12 (7.6-17)	9.4 (5.7-15)	7.8 (4.5-13)	7.0 (3.9-12)	6.6 (3.5-11)	6.2 (3.3-11)
3	69 (57-80)	53 (42-64)	39 (30-48)	28 (21-39)	21 (14-32)	17 (10-26)	13 (7.6-23)	11 (5.9-20)	10 (5.1-18)	9.4 (4.6-17)	8.8 (4.2-16)
4	81 (70-88)	66 (53-76)	51 (38-59)	39 (28-48)	30 (21-39)	23 (16-33)	19 (12-28)	16 (9.6-25)	14 (8.2-23)	13 (7.3-22)	12 (6.7-21)
5	89 (84-91)	79 (71-84)	65 (56-70)	51 (43-57)	40 (32-47)	32 (25-39)	26 (21-33)	22 (17-29)	19 (15-27)	18 (13-25)	17 (12-24)
6	92	87	77	64	52	42	34	29	26	24	23

Age = 60 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	30	21	15	11	8.1	6.4	5.1	4.3	3.9	3.5	3.3
1	41 (37-46)	30 (27-34)	21 (19-25)	16 (13-18)	12 (9.5-14)	9.4 (7.1-11)	7.6 (5.5-9.7)	6.3 (4.4-8.3)	5.7 (3.8-7.7)	5.2 (3.5-7.2)	4.8 (3.2-6.8)
2	54 (46-64)	40 (34-50)	30 (25-38)	22 (18-29)	17 (13-23)	14 (9.2-19)	11 (7.0-16)	9.1 (5.5-14)	8.2 (4.7-13)	7.5 (4.2-12)	7.0 (3.8-12)
3	67 (56-75)	53 (43-62)	41 (33-50)	31 (24-42)	24 (17-35)	19 (12-29)	15 (9.2-25)	13 (7.2-22)	12 (6.1-20)	11 (5.4-19)	9.9 (4.9-18)
4	77 (68-83)	65 (54-72)	53 (41-60)	41 (31-51)	33 (24-43)	26 (19-36)	21 (15-31)	18 (11-27)	16 (9.8-25)	15 (8.6-24)	14 (7.7-23)
5	85 (81-88)	76 (70-80)	65 (58-70)	53 (46-59)	43 (36-50)	35 (29-43)	29 (24-37)	24 (19-32)	22 (17-30)	20 (15-28)	19 (13-26)
6	89	84	76	65	54	45	38	32	29	27	25

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

Age = 65 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	29	21	16	12	9.1	7.1	5.7	4.8	4.3	3.9	3.5
1	39 (37-43)	30 (27-33)	22 (20-25)	17 (14-19)	13 (11-15)	10 (8.0-13)	8.3 (6.2-11)	7.0 (5.0-9.2)	6.2 (4.3-8.4)	5.6 (3.8-7.8)	5.2 (3.4-7.2)
2	51 (44-59)	40 (34-48)	31 (26-37)	24 (19-29)	18 (14-24)	15 (10-20)	12 (7.9-17)	10 (6.3-15)	8.9 (5.3-14)	8.1 (4.6-13)	7.4 (4.1-12)
3	63 (54-70)	51 (43-59)	41 (34-50)	32 (25-42)	25 (19-35)	20 (14-30)	17 (10-26)	14 (8.3-23)	12 (7.0-21)	11 (6.0-20)	10 (5.3-18)
4	72 (65-78)	62 (53-68)	52 (42-59)	42 (33-51)	34 (26-44)	27 (21-37)	22 (16-32)	19 (13-28)	17 (11-26)	15 (9.4-24)	14 (8.3-23)
5	80 (76-83)	72 (67-76)	62 (57-68)	52 (47-59)	43 (38-51)	36 (31-44)	30 (25-38)	25 (21-33)	23 (18-31)	21 (15-28)	19 (14-27)
6	84	79	72	63	54	45	38	33	30	27	25

Age = 70 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	28	21	16	12	9.7	7.7	6.2	5.2	4.6	4.1	3.7
1	39 (34-46)	30 (26-36)	23 (20-28)	18 (15-22)	14 (11-17)	11 (8.6-13)	8.7 (6.6-10)	7.3 (5.4-8.6)	6.4 (4.6-7.5)	5.6 (4.0-6.6)	5.1 (3.5-6.0)
2	51 (43-59)	41 (34-49)	32 (26-40)	25 (20-32)	20 (15-25)	15 (11-20)	12 (8.6-16)	10 (7.0-14)	8.8 (5.8-12)	7.7 (5.0-11)	6.9 (4.4-9.5)
3	63 (54-71)	53 (44-62)	43 (34-53)	34 (26-44)	27 (20-36)	21 (15-30)	17 (11-24)	14 (9.2-20)	12 (7.7-18)	11 (6.6-16)	9.3 (5.7-14)
4	72 (65-78)	64 (56-71)	55 (46-63)	45 (37-54)	37 (29-45)	29 (22-37)	23 (17-31)	19 (14-26)	16 (12-23)	14 (10-20)	12 (8.7-18)
5	79 (74-83)	74 (67-78)	66 (59-71)	57 (49-63)	48 (40-54)	39 (32-45)	31 (26-38)	26 (21-32)	22 (18-28)	19 (16-24)	17 (14-22)
6	84	80	75	68	59	50	41	34	29	25	22

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

Age = 75 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	26	21	16	13	10	8.1	6.5	5.6	4.9	4.3	3.8
1	38 (31-57)	31 (24-48)	24 (19-39)	19 (15-31)	15 (11-24)	12 (8.9-18)	9.6 (7.0-14)	8.0 (5.8-11)	6.9 (4.9-9.0)	5.9 (4.2-7.4)	5.2 (3.7-6.1)
2	50 (39-67)	42 (31-59)	35 (25-50)	28 (19-42)	23 (15-34)	18 (12-27)	14 (9.3-21)	12 (7.6-17)	9.8 (6.3-14)	8.3 (5.4-11)	7.1 (4.6-9.4)
3	62 (48-74)	55 (40-68)	47 (32-60)	39 (26-52)	32 (20-44)	26 (16-36)	20 (12-29)	17 (10-24)	14 (8.4-20)	12 (7.1-17)	9.8 (6.1-14)
4	71 (58-80)	66 (50-75)	59 (42-69)	51 (35-62)	43 (28-54)	36 (22-45)	29 (18-37)	24 (15-31)	20 (12-26)	16 (10-21)	14 (9.0-18)
5	79 (66-83)	75 (59-80)	69 (52-75)	63 (45-70)	55 (37-62)	48 (31-54)	40 (25-46)	33 (21-39)	28 (18-33)	23 (15-28)	19 (13-23)
6	83	81	78	73	67	60	52	44	37	31	26

Age = 80 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	23	19	15	12	10	8.2	6.8	5.8	5.1	4.4	3.9
1	33 (26-51)	27 (21-44)	23 (17-37)	19 (14-30)	15 (11-24)	12 (8.8-20)	10 (7.1-16)	8.5 (6.0-13)	7.2 (5.1-11)	6.2 (4.4-8.7)	5.4 (3.8-7.3)
2	44 (33-60)	37 (27-54)	32 (22-46)	26 (18-39)	22 (15-33)	18 (12-27)	15 (9.5-22)	12 (8.0-18)	10 (6.7-15)	8.8 (5.7-13)	7.5 (4.9-11)
3	54 (40-68)	48 (34-62)	42 (29-56)	36 (24-49)	30 (20-42)	25 (16-35)	21 (13-29)	18 (11-25)	15 (9.0-21)	12 (7.6-17)	11 (6.5-15)
4	64 (48-74)	59 (42-69)	53 (36-63)	47 (31-57)	40 (25-50)	34 (21-44)	29 (17-37)	24 (15-32)	21 (12-27)	17 (11-23)	15 (9.2-19)
5	73 (57-78)	68 (51-74)	63 (45-69)	57 (39-64)	51 (33-58)	45 (28-51)	38 (23-45)	33 (20-39)	28 (17-34)	24 (15-29)	20 (13-25)
6	79	76	72	67	62	55	49	43	38	32	28

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

Age = 85 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	20	17	14	12	9.7	8.1	6.9	6.0	5.3	4.6	4.1
1	28 (21-44)	24 (18-39)	20 (15-33)	17 (12-28)	14 (10-24)	12 (8.4-20)	10 (7.0-16)	8.7 (6.1-14)	7.6 (5.2-12)	6.6 (4.5-10)	5.8 (3.9-8.5)
2	38 (27-54)	33 (23-48)	28 (20-42)	24 (16-37)	21 (14-31)	17 (11-26)	15 (9.4-22)	13 (8.1-19)	11 (7.0-16)	9.4 (6.0-14)	8.2 (5.2-12)
3	48 (34-61)	43 (29-56)	38 (25-51)	33 (21-45)	28 (18-39)	24 (15-34)	21 (13-29)	18 (11-26)	16 (9.4-22)	13 (8.1-19)	12 (6.9-16)
4	58 (42-68)	53 (37-63)	48 (32-58)	43 (27-53)	38 (23-48)	33 (20-42)	28 (17-37)	25 (15-32)	22 (13-28)	19 (11-25)	16 (9.5-21)
5	67 (50-72)	63 (45-69)	58 (40-65)	53 (35-60)	48 (30-55)	43 (26-49)	38 (22-44)	34 (19-40)	29 (17-35)	26 (15-31)	22 (13-27)
6	74	71	68	63	58	53	48	43	39	34	30

Age = 90 years

Number of CRFs	BMD T-score (femoral neck)										
	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0	0.5	1.0
0	16	14	12	10	8.4	7.2	6.3	5.6	4.9	4.4	3.9
1	23 (17-37)	20 (14-32)	17 (12-28)	15 (10-24)	12 (8.8-21)	11 (7.4-18)	9.3 (6.4-15)	8.2 (5.6-13)	7.2 (5.0-12)	6.4 (4.3-10)	5.6 (3.8-8.7)
2	31 (22-46)	28 (19-41)	24 (16-36)	21 (14-32)	18 (12-28)	15 (9.9-24)	14 (8.6-21)	12 (7.6-18)	11 (6.7-16)	9.2 (5.8-14)	8.1 (5.1-12)
3	41 (28-54)	37 (25-50)	33 (21-45)	29 (18-40)	25 (16-36)	22 (13-31)	19 (12-28)	17 (10-25)	15 (9.0-22)	13 (7.9-19)	12 (6.9-17)
4	51 (35-62)	47 (31-58)	43 (27-53)	39 (24-49)	34 (21-44)	30 (18-39)	27 (16-35)	24 (14-32)	21 (12-28)	19 (11-25)	17 (9.5-22)
5	61 (43-67)	57 (39-64)	53 (35-60)	49 (31-56)	45 (27-51)	40 (23-46)	36 (21-42)	33 (19-39)	29 (16-35)	26 (15-31)	23 (13-28)
6	68	66	63	59	55	51	47	43	39	35	32