

Norway - The probabilities of a hip fracture in men

The following tables give the 10-year probability (%) of a hip 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	22	12	6.6	3.5	1.8	1.0	0.5	0.3	0.1	0.1	0.0	
1	33 (23-41)	19 (13-24)	10 (6.9-14)	5.6 (3.7-7.3)	3.0 (1.9-3.9)	1.6 (1.0-2.1)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	
2	46 (31-62)	28 (18-40)	16 (9.7-24)	8.8 (5.2-13)	4.7 (2.8-7.2)	2.5 (1.4-3.8)	1.3 (0.8-2.0)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	
3	61 (43-79)	40 (26-58)	24 (14-37)	14 (7.8-21)	7.4 (4.2-12)	3.9 (2.2-6.4)	2.1 (1.2-3.4)	1.1 (0.6-1.8)	0.6 (0.3-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	
4	76 (61-88)	55 (40-72)	35 (23-50)	20 (13-31)	11 (7.1-18)	6.1 (3.8-9.7)	3.3 (2.0-5.2)	1.7 (1.0-2.7)	0.9 (0.6-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	
5	87 (80-93)	70 (60-82)	48 (39-62)	30 (23-41)	17 (13-24)	9.4 (6.9-13)	5.0 (3.7-7.3)	2.7 (1.9-3.9)	1.4 (1.0-2.1)	0.8 (0.6-1.1)	0.4 (0.3-0.6)	
6	93	83	64	42	25	14	7.6	4.1	2.2	1.2	0.6	

Ten year probability of hip 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	24	14	7.7	4.3	2.4	1.3	0.7	0.4	0.2	0.1	0.1
1	34 (25-41)	21 (14-25)	12 (8.1-15)	6.7 (4.5-8.3)	3.7 (2.5-4.6)	2.0 (1.4-2.5)	1.1 (0.7-1.4)	0.6 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	48 (33-61)	30 (20-41)	18 (11-25)	10 (6.3-15)	5.8 (3.5-8.3)	3.2 (1.9-4.6)	1.7 (1.0-2.5)	0.9 (0.6-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
3	62 (46-77)	42 (29-58)	26 (17-38)	16 (9.5-23)	8.8 (5.3-14)	4.9 (2.9-7.7)	2.7 (1.6-4.3)	1.5 (0.9-2.3)	0.8 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
4	75 (63-86)	56 (43-71)	37 (27-52)	23 (16-33)	13 (8.8-20)	7.5 (4.9-11)	4.2 (2.7-6.4)	2.3 (1.5-3.6)	1.3 (0.8-2.0)	0.7 (0.5-1.1)	0.4 (0.3-0.6)
5	85 (80-91)	70 (63-81)	51 (43-63)	33 (27-43)	20 (16-27)	11 (8.8-16)	6.3 (4.9-9.0)	3.5 (2.7-5.0)	2.0 (1.5-2.8)	1.1 (0.9-1.6)	0.6 (0.5-0.9)
6	91	82	65	45	28	17	9.5	5.3	3.0	1.7	1.0

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	23	14	8.5	5.0	2.9	1.7	1.0	0.6	0.3	0.2	0.1
1	33 (24-38)	21 (15-24)	13 (8.9-15)	7.6 (5.2-8.9)	4.5 (3.1-5.2)	2.6 (1.8-3.1)	1.5 (1.0-1.8)	0.9 (0.6-1.0)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
2	45 (32-56)	30 (20-39)	19 (12-25)	11 (7.3-15)	6.8 (4.3-9.3)	4.0 (2.5-5.5)	2.3 (1.5-3.2)	1.4 (0.8-1.9)	0.8 (0.5-1.1)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
3	58 (44-70)	41 (29-54)	27 (18-37)	17 (11-24)	10 (6.5-15)	6.1 (3.8-9.0)	3.6 (2.2-5.3)	2.1 (1.3-3.1)	1.2 (0.8-1.9)	0.7 (0.5-1.1)	0.4 (0.3-0.7)
4	70 (60-80)	54 (43-67)	37 (28-50)	24 (18-34)	15 (11-22)	9.0 (6.3-13)	5.3 (3.7-8.0)	3.1 (2.2-4.7)	1.9 (1.3-2.9)	1.1 (0.8-1.7)	0.7 (0.5-1.0)
5	80 (76-86)	67 (61-76)	50 (44-61)	34 (29-44)	22 (18-29)	13 (11-18)	8.0 (6.6-11)	4.7 (3.9-6.6)	2.8 (2.4-4.0)	1.7 (1.4-2.4)	1.0 (0.9-1.5)
6	87	78	63	45	30	19	12	7.0	4.2	2.6	1.5

Ten year probability of hip 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	22	14	9.0	5.6	3.5	2.2	1.3	0.8	0.5	0.3	0.2
1	31 (23-35)	20 (15-23)	13 (9.4-15)	8.4 (5.9-9.8)	5.2 (3.7-6.1)	3.3 (2.3-3.8)	2.0 (1.4-2.4)	1.2 (0.9-1.5)	0.8 (0.6-0.9)	0.5 (0.4-0.6)	0.3 (0.2-0.4)
2	41 (31-49)	29 (20-35)	19 (13-24)	12 (8.3-16)	7.8 (5.2-10)	4.9 (3.2-6.3)	3.0 (2.0-3.9)	1.9 (1.2-2.5)	1.2 (0.8-1.6)	0.8 (0.5-1.0)	0.5 (0.3-0.6)
3	53 (42-62)	39 (29-48)	27 (19-35)	18 (12-24)	11 (7.8-16)	7.2 (4.8-10)	4.5 (3.0-6.3)	2.8 (1.9-4.0)	1.8 (1.2-2.5)	1.1 (0.8-1.6)	0.7 (0.5-1.0)
4	64 (56-73)	50 (42-61)	36 (29-46)	25 (19-33)	16 (12-22)	10 (7.8-15)	6.6 (4.9-9.4)	4.2 (3.1-6.0)	2.7 (2.0-3.9)	1.7 (1.2-2.5)	1.1 (0.8-1.6)
5	74 (70-80)	61 (57-70)	47 (43-57)	34 (30-43)	23 (20-30)	15 (13-20)	9.6 (8.1-13)	6.1 (5.1-8.4)	3.9 (3.3-5.4)	2.5 (2.1-3.5)	1.6 (1.3-2.2)
6	81	71	59	44	31	21	14	8.8	5.7	3.7	2.4

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	20	14	9.4	6.3	4.1	2.7	1.8	1.2	0.8	0.5	0.4
1	31 (27-38)	22 (19-27)	15 (13-19)	10 (8.8-13)	6.7 (5.8-8.6)	4.4 (3.8-5.7)	2.9 (2.5-3.8)	1.9 (1.7-2.5)	1.3 (1.1-1.7)	0.9 (0.8-1.1)	0.6 (0.5-0.8)
2	43 (38-52)	32 (27-40)	23 (19-29)	16 (13-21)	11 (8.7-14)	7.2 (5.8-9.6)	4.8 (3.8-6.4)	3.2 (2.5-4.3)	2.2 (1.7-2.9)	1.5 (1.2-2.0)	1.0 (0.8-1.3)
3	56 (49-64)	45 (38-52)	34 (27-40)	24 (19-30)	17 (13-21)	11 (8.8-14)	7.7 (5.8-9.7)	5.2 (3.9-6.6)	3.5 (2.6-4.5)	2.4 (1.8-3.1)	1.6 (1.2-2.1)
4	68 (61-74)	58 (50-64)	46 (38-52)	35 (28-40)	25 (20-30)	18 (13-21)	12 (9.0-14)	8.3 (6.1-10)	5.7 (4.2-6.9)	3.9 (2.8-4.8)	2.7 (1.9-3.2)
5	77 (71-80)	69 (62-72)	59 (51-62)	48 (40-51)	37 (30-40)	27 (21-29)	19 (15-21)	13 (10-15)	9.1 (7.0-10)	6.3 (4.8-7.1)	4.3 (3.3-4.9)
6	83	78	70	61	50	38	28	20	14	10	6.9

Ten year probability of hip 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	19	14	9.7	6.9	4.8	3.4	2.3	1.7	1.2	0.8	0.6
1	31 (25-53)	23 (19-44)	17 (13-34)	13 (9.6-26)	9.1 (6.8-19)	6.4 (4.7-14)	4.5 (3.3-9.7)	3.2 (2.4-7.0)	2.3 (1.7-5.1)	1.7 (1.2-3.6)	1.2 (0.9-2.6)
2	44 (33-64)	36 (25-55)	28 (18-46)	21 (13-37)	16 (9.5-28)	11 (6.7-21)	8.2 (4.7-15)	5.9 (3.3-11)	4.3 (2.4-8.3)	3.1 (1.7-6.0)	2.2 (1.2-4.3)
3	57 (42-72)	49 (33-65)	41 (25-57)	33 (19-48)	25 (14-38)	19 (9.8-29)	14 (6.9-22)	10 (5.0-17)	7.5 (3.6-12)	5.5 (2.6-9.0)	4.0 (1.9-6.5)
4	69 (52-78)	62 (43-73)	54 (35-66)	46 (26-57)	37 (20-48)	29 (14-38)	22 (10-29)	17 (7.5-23)	13 (5.5-17)	9.3 (3.9-13)	6.8 (2.8-9.5)
5	78 (62-82)	73 (54-78)	66 (45-73)	59 (36-66)	51 (28-57)	42 (21-47)	33 (16-38)	26 (12-30)	20 (8.6-23)	15 (6.3-18)	11 (4.6-13)
6	83	81	76	71	64	56	47	38	30	24	18

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	17	13	9.5	7.1	5.3	3.9	2.9	2.2	1.7	1.3	0.9
1	26 (21-48)	21 (16-40)	16 (12-33)	13 (9.2-26)	9.6 (6.9-20)	7.3 (5.1-16)	5.4 (3.8-12)	4.2 (2.9-9.1)	3.2 (2.2-7.0)	2.4 (1.7-5.3)	1.8 (1.2-4.1)
2	38 (26-58)	32 (21-51)	26 (16-43)	20 (12-35)	16 (9.5-28)	12 (7.1-22)	9.4 (5.3-18)	7.3 (4.1-14)	5.6 (3.1-11)	4.3 (2.3-8.3)	3.3 (1.8-6.4)
3	50 (34-66)	43 (27-59)	37 (22-53)	30 (17-45)	25 (13-38)	20 (9.9-31)	15 (7.5-25)	12 (5.8-20)	9.5 (4.4-16)	7.3 (3.4-12)	5.6 (2.6-9.5)
4	61 (42-72)	55 (36-67)	49 (29-61)	42 (23-54)	35 (18-47)	29 (14-39)	23 (11-32)	19 (8.6-26)	15 (6.6-21)	12 (5.1-17)	9.3 (3.9-13)
5	71 (52-76)	66 (45-72)	60 (38-67)	54 (32-60)	47 (26-53)	40 (20-46)	34 (16-39)	28 (13-33)	23 (9.9-27)	18 (7.7-22)	15 (5.9-18)
6	78	75	71	65	59	52	45	39	33	27	22

Ten year probability of hip 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	13	11	8.5	6.7	5.2	4.1	3.2	2.6	2.1	1.6	1.3
1	22 (17-41)	18 (14-35)	15 (11-29)	12 (8.7-24)	9.4 (6.8-20)	7.5 (5.3-16)	6.0 (4.2-13)	4.8 (3.4-11)	3.9 (2.7-8.6)	3.1 (2.2-6.9)	2.5 (1.7-5.6)
2	32 (21-51)	27 (17-45)	23 (14-39)	19 (11-33)	15 (9.0-28)	12 (7.1-23)	10 (5.7-19)	8.3 (4.6-15)	6.7 (3.7-13)	5.5 (3.0-10)	4.4 (2.4-8.3)
3	43 (28-59)	38 (23-54)	33 (19-48)	28 (15-42)	23 (12-36)	19 (9.9-30)	16 (7.9-26)	13 (6.4-22)	11 (5.2-18)	9.0 (4.2-15)	7.4 (3.4-12)
4	55 (35-66)	50 (30-61)	44 (25-56)	39 (21-50)	33 (17-44)	28 (14-38)	24 (11-33)	20 (9.3-28)	17 (7.6-24)	14 (6.2-20)	12 (5.0-17)
5	65 (45-71)	61 (39-67)	56 (34-62)	50 (29-57)	45 (24-51)	39 (20-45)	34 (16-39)	29 (13-34)	25 (11-29)	21 (9.1-25)	18 (7.4-21)
6	73	70	66	62	56	51	45	40	35	31	26

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	9.7	8.0	6.6	5.4	4.4	3.6	3.0	2.5	2.1	1.8	1.5
1	17 (12-33)	14 (10-28)	12 (8.5-24)	9.7 (7.0-20)	8.0 (5.8-17)	6.6 (4.7-14)	5.6 (3.9-12)	4.7 (3.3-10)	4.0 (2.8-8.7)	3.3 (2.3-7.4)	2.8 (1.9-6.2)
2	25 (16-43)	22 (13-38)	19 (11-33)	16 (9.3-28)	13 (7.7-24)	11 (6.3-20)	9.5 (5.3-18)	8.1 (4.5-15)	6.8 (3.8-13)	5.8 (3.2-11)	4.9 (2.7-9.2)
3	36 (21-52)	32 (18-47)	28 (15-42)	24 (13-37)	21 (11-32)	18 (8.8-28)	15 (7.4-24)	13 (6.3-21)	11 (5.3-18)	9.6 (4.5-16)	8.1 (3.7-13)
4	48 (29-59)	43 (25-55)	39 (21-50)	34 (18-45)	30 (15-40)	26 (13-36)	23 (11-31)	20 (9.1-28)	17 (7.7-24)	15 (6.5-21)	13 (5.5-18)
5	59 (38-65)	55 (33-61)	51 (29-57)	46 (25-52)	41 (21-47)	37 (18-42)	33 (15-38)	29 (13-34)	26 (11-30)	23 (9.7-26)	20 (8.2-23)
6	67	65	61	58	53	49	44	40	36	32	29