Iceland - 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 Iceland. 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 (1.0-2.0)	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 (2.7-7.1)	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	62 (43-79)	41 (26-58)	24 (14-37)	14 (7.8-22)	7.4 (4.1-12)	3.9 (2.2-6.4)	2.1 (1.1-3.4)	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 (61-89)	55 (40-72)	35 (23-50)	20 (13-31)	11 (7.0-18)	6.1 (3.7-9.7)	3.2 (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 (81-93)	70 (60-83)	49 (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	94	84	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 Iceland.

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	23	13	7.3	4.0	2.2	1.2	0.7	0.4	0.2	0.1	0.1
1	33 (24-39)	20 (14-24)	11 (7.7-14)	6.3 (4.2-7.8)	3.5 (2.3-4.3)	1.9 (1.3-2.4)	1.0 (0.7-1.3)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	46 (32-59)	29 (19-39)	17 (11-24)	9.8 (6.0-14)	5.4 (3.3-7.9)	3.0 (1.8-4.4)	1.6 (1.0-2.4)	0.9 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	60 (44-76)	41 (27-56)	25 (16-37)	15 (9.0-22)	8.4 (5.0-13)	4.6 (2.7-7.3)	2.6 (1.5-4.0)	1.4 (0.8-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.1-0.4)
4	74 (62-86)	55 (41-70)	36 (25-50)	22 (15-32)	13 (8.4-19)	7.1 (4.6-11)	3.9 (2.6-6.1)	2.2 (1.4-3.4)	1.2 (0.8-1.9)	0.7 (0.4-1.1)	0.4 (0.3-0.6)
5	85 (80-91)	69 (61-81)	49 (41-62)	31 (25-42)	19 (15-26)	11 (8.4-15)	6.0 (4.7-8.6)	3.3 (2.6-4.8)	1.9 (1.4-2.7)	1.0 (0.8-1.5)	0.6 (0.5-0.9)
6	92	82	64	44	27	16	9.0	5.0	2.8	1.6	0.9

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	22	13	7.8	4.6	2.7	1.6	0.9	0.5	0.3	0.2	0.1
1	31 (23-35)	20 (14-23)	12 (8.2-14)	7.0 (4.8-8.2)	4.1 (2.8-4.9)	2.4 (1.6-2.8)	1.4 (0.9-1.6)	0.8 (0.5-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)
2	43 (30-54)	28 (19-37)	18 (11-24)	11 (6.8-14)	6.3 (4.0-8.6)	3.7 (2.3-5.1)	2.2 (1.3-3.0)	1.2 (0.8-1.7)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
3	56 (42-69)	39 (27-52)	25 (17-35)	16 (10-23)	9.5 (6.0-14)	5.6 (3.5-8.4)	3.3 (2.0-4.9)	1.9 (1.2-2.9)	1.1 (0.7-1.7)	0.7 (0.4-1.0)	0.4 (0.3-0.6)
4	69 (58-80)	52 (41-66)	35 (27-48)	23 (16-32)	14 (9.9-20)	8.4 (5.9-12)	5.0 (3.4-7.4)	2.9 (2.0-4.4)	1.7 (1.2-2.6)	1.0 (0.7-1.6)	0.6 (0.4-1.0)
5	80 (76-86)	65 (59-76)	48 (42-59)	32 (28-42)	20 (17-28)	12 (10-17)	7.4 (6.2-10)	4.4 (3.6-6.2)	2.6 (2.2-3.7)	1.6 (1.3-2.3)	0.9 (0.8-1.4)
6	87	77	61	44	29	18	11	6.5	3.9	2.4	1.4

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

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	20	13	8.1	5.1	3.1	1.9	1.2	0.7	0.5	0.3	0.2
1	28 (21-32)	19 (14-22)	12 (8.6-14)	7.6 (5.3-8.9)	4.7 (3.3-5.6)	2.9 (2.0-3.5)	1.8 (1.3-2.1)	1.1 (0.8-1.3)	0.7 (0.5-0.8)	0.5 (0.3-0.5)	0.3 (0.2-0.3)
2	39 (28-47)	27 (19-33)	17 (12-22)	11 (7.5-14)	7.1 (4.7-9.2)	4.4 (2.9-5.7)	2.7 (1.8-3.6)	1.7 (1.1-2.2)	1.1 (0.7-1.4)	0.7 (0.4-0.9)	0.4 (0.3-0.6)
3	50 (39-61)	36 (27-46)	25 (18-33)	16 (11-22)	10 (7.0-14)	6.5 (4.4-9.2)	4.1 (2.7-5.8)	2.5 (1.7-3.6)	1.6 (1.1-2.3)	1.0 (0.7-1.5)	0.7 (0.4-0.9)
4	62 (54-72)	48 (39-59)	34 (27-44)	23 (18-31)	15 (11-21)	9.6 (7.1-14)	6.0 (4.4-8.6)	3.8 (2.8-5.5)	2.4 (1.8-3.5)	1.5 (1.1-2.3)	1.0 (0.7-1.4)
5	73 (69-80)	59 (55-69)	45 (40-55)	32 (28-41)	21 (18-28)	14 (12-19)	8.8 (7.3-12)	5.5 (4.6-7.7)	3.6 (3.0-5.0)	2.3 (1.9-3.2)	1.5 (1.2-2.0)
6	81	71	57	42	29	19	13	8.1	5.2	3.3	2.1

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	19	13	8.7	5.8	3.8	2.5	1.6	1.1	0.7	0.5	0.3
1	29 (26-36)	20 (18-25)	14 (12-18)	9.4 (8.1-12)	6.2 (5.4-7.9)	4.1 (3.5-5.3)	2.7 (2.3-3.4)	1.8 (1.5-2.3)	1.2 (1.0-1.5)	0.8 (0.7-1.0)	0.5 (0.5-0.7)
2	41 (36-50)	30 (26-38)	22 (18-28)	15 (12-19)	10 (8.0-13)	6.7 (5.3-8.9)	4.4 (3.5-5.9)	2.9 (2.3-4.0)	2.0 (1.6-2.7)	1.3 (1.1-1.8)	0.9 (0.7-1.2)
3	55 (48-63)	43 (36-51)	32 (26-39)	23 (18-28)	16 (12-20)	11 (8.1-13)	7.1 (5.3-9.1)	4.8 (3.6-6.2)	3.3 (2.4-4.2)	2.2 (1.6-2.9)	1.5 (1.1-2.0)
4	67 (60-73)	57 (48-63)	45 (36-51)	33 (26-39)	24 (18-28)	17 (13-20)	11 (8.4-14)	7.7 (5.7-9.4)	5.3 (3.9-6.5)	3.6 (2.6-4.4)	2.4 (1.8-3.0)
5	77 (71-79)	69 (61-72)	58 (50-61)	46 (39-50)	35 (28-38)	25 (20-28)	18 (14-20)	12 (9.5-14)	8.5 (6.5-9.6)	5.8 (4.5-6.7)	4.0 (3.0-4.6)
6	83	77	70	60	48	37	27	19	13	9.3	6.4

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

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	18	13	9.4	6.6	4.6	3.2	2.2	1.6	1.1	0.8	0.6
1	30 (25-53)	23 (18-43)	17 (13-33)	12 (9.3-25)	8.8 (6.5-18)	6.2 (4.6-13)	4.4 (3.2-9.3)	3.1 (2.3-6.7)	2.2 (1.6-4.9)	1.6 (1.1-3.5)	1.1 (0.8-2.5)
2	44 (33-64)	35 (24-55)	28 (18-46)	21 (13-36)	15 (9.1-28)	11 (6.4-21)	7.9 (4.5-15)	5.7 (3.2-11)	4.1 (2.3-8.0)	3.0 (1.6-5.8)	2.1 (1.2-4.2)
3	57 (42-73)	49 (33-65)	40 (25-57)	32 (18-47)	25 (13-38)	18 (9.5-29)	14 (6.7-22)	10 (4.8-16)	7.3 (3.5-12)	5.3 (2.5-8.7)	3.8 (1.8-6.3)
4	69 (52-78)	62 (43-73)	54 (34-66)	46 (26-57)	37 (19-47)	29 (14-38)	22 (10-29)	16 (7.3-22)	12 (5.3-17)	9.0 (3.8-13)	6.6 (2.7-9.3)
5	78 (62-82)	73 (54-78)	67 (45-73)	59 (36-66)	51 (28-57)	42 (21-47)	33 (15-37)	26 (11-30)	20 (8.5-23)	15 (6.2-17)	11 (4.5-13)
6	84	81	77	71	64	56	46	38	30	23	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	9.6	7.2	5.4	4.0	2.9	2.2	1.7	1.3	1.0
1	27 (21-48)	21 (16-41)	17 (12-33)	13 (9.4-26)	9.8 (7.0-21)	7.3 (5.2-16)	5.5 (3.8-12)	4.2 (2.9-9.2)	3.2 (2.2-7.0)	2.4 (1.7-5.4)	1.8 (1.3-4.1)
2	39 (27-59)	32 (21-51)	26 (17-44)	21 (13-36)	16 (9.7-29)	13 (7.2-23)	9.6 (5.4-18)	7.4 (4.1-14)	5.7 (3.1-11)	4.4 (2.4-8.4)	3.3 (1.8-6.5)
3	51 (35-67)	44 (28-60)	37 (22-53)	31 (17-46)	25 (13-39)	20 (10-31)	16 (7.6-25)	12 (5.9-20)	9.6 (4.5-16)	7.4 (3.4-12)	5.7 (2.6-9.6)
4	62 (43-73)	56 (36-68)	49 (30-62)	43 (24-55)	36 (19-47)	30 (15-40)	24 (11-33)	19 (8.7-27)	15 (6.7-21)	12 (5.1-17)	9.4 (3.9-13)
5	72 (53-77)	67 (46-73)	61 (39-67)	55 (32-61)	48 (26-54)	41 (21-47)	34 (16-40)	29 (13-33)	23 (10-28)	19 (7.8-22)	15 (6.0-18)
6	79	76	71	66	60	53	46	40	33	28	22

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

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	14	11	8.7	6.9	5.4	4.2	3.3	2.6	2.1	1.7	1.3
1	23 (18-42)	19 (14-36)	15 (11-30)	12 (8.9-25)	9.7 (7.0-20)	7.6 (5.5-16)	6.1 (4.3-13)	4.9 (3.4-11)	4.0 (2.8-8.7)	3.2 (2.2-7.0)	2.5 (1.7-5.6)
2	33 (22-52)	28 (18-46)	24 (15-40)	19 (12-34)	16 (9.4-28)	13 (7.4-23)	10 (5.9-19)	8.5 (4.8-16)	6.9 (3.8-13)	5.6 (3.1-11)	4.5 (2.5-8.6)
3	45 (29-60)	39 (24-55)	34 (20-49)	29 (16-43)	24 (13-37)	20 (10-31)	17 (8.2-26)	14 (6.7-22)	11 (5.4-19)	9.3 (4.3-15)	7.5 (3.5-13)
4	56 (37-67)	51 (31-63)	45 (26-57)	40 (22-52)	35 (18-46)	29 (14-40)	25 (12-34)	21 (9.7-29)	18 (7.9-25)	15 (6.4-21)	12 (5.2-17)
5	66 (46-72)	62 (41-68)	57 (35-63)	52 (30-58)	46 (25-52)	40 (21-46)	35 (17-41)	30 (14-35)	26 (12-30)	22 (9.5-26)	19 (7.7-22)
6	74	71	67	63	58	52	47	42	37	32	27

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	9.5	7.8	6.3	5.2	4.2	3.4	2.8	2.4	2.0	1.6	1.4
1	16 (12-32)	14 (10-28)	11 (8.2-24)	9.4 (6.7-20)	7.7 (5.5-17)	6.3 (4.5-14)	5.3 (3.7-12)	4.5 (3.1-9.8)	3.7 (2.6-8.2)	3.1 (2.2-6.9)	2.6 (1.8-5.8)
2	26 (16-43)	22 (13-37)	19 (11-32)	16 (9.2-28)	13 (7.5-24)	11 (6.2-20)	9.2 (5.2-17)	7.8 (4.3-15)	6.6 (3.6-12)	5.5 (3.0-10)	4.6 (2.5-8.8)
3	37 (22-53)	32 (18-48)	28 (15-42)	24 (13-37)	21 (10-32)	17 (8.6-28)	15 (7.2-24)	13 (6.1-21)	11 (5.1-18)	9.2 (4.3-15)	7.8 (3.6-13)
4	49 (29-61)	44 (25-56)	40 (22-51)	35 (18-46)	31 (15-41)	26 (13-36)	23 (11-31)	20 (9.0-27)	17 (7.6-24)	15 (6.4-21)	13 (5.4-18)
5	60 (39-66)	56 (34-62)	52 (30-58)	47 (25-53)	42 (22-48)	37 (18-43)	33 (16-39)	29 (13-34)	26 (11-30)	22 (9.6-27)	19 (8.1-23)
6	69	66	63	59	55	50	45	41	37	33	29