Switzerland - 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 Switzerland. 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	21	12	6.3	3.4	1.8	0.9	0.5	0.3	0.1	0.1	0.0
1	32 (22-40)	18 (12-23)	10 (6.6-13)	5.4 (3.5-7.0)	2.8 (1.9-3.7)	1.5 (1.0-2.0)	0.8 (0.5-1.0)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
2	45 (30-60)	27 (17-39)	15 (9.3-23)	8.4 (5.0-13)	4.5 (2.6-6.8)	2.4 (1.4-3.6)	1.3 (0.7-1.9)	0.7 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	59 (42-76)	39 (25-55)	23 (14-35)	13 (7.5-21)	7.1 (4.0-11)	3.8 (2.1-6.1)	2.0 (1.1-3.3)	1.0 (0.6-1.7)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	74 (59-86)	53 (38-70)	34 (22-48)	20 (12-29)	11 (6.8-17)	5.9 (3.6-9.2)	3.1 (1.9-4.9)	1.6 (1.0-2.6)	0.9 (0.5-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.4)
5	85 (78-91)	68 (58-80)	47 (37-60)	29 (22-39)	16 (12-23)	8.9 (6.5-13)	4.8 (3.5-6.9)	2.5 (1.8-3.7)	1.4 (1.0-2.0)	0.7 (0.5-1.1)	0.4 (0.3-0.6)
6	92	81	62	40	24	13	7.3	3.9	2.1	1.1	0.6

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

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	20	11	6.4	3.5	1.9	1.1	0.6	0.3	0.2	0.1	0.1
1	29 (21-35)	17 (12-21)	9.9 (6.7-12)	5.5 (3.7-6.8)	3.1 (2.0-3.8)	1.7 (1.1-2.1)	0.9 (0.6-1.1)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	41 (28-54)	26 (17-35)	15 (9.4-21)	8.6 (5.2-12)	4.8 (2.9-6.9)	2.6 (1.6-3.8)	1.4 (0.9-2.1)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
3	55 (40-71)	37 (24-51)	22 (14-33)	13 (7.9-20)	7.3 (4.4-11)	4.1 (2.4-6.3)	2.2 (1.3-3.5)	1.2 (0.7-1.9)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)
4	69 (56-82)	50 (37-65)	32 (22-45)	19 (13-28)	11 (7.3-17)	6.2 (4.1-9.5)	3.4 (2.2-5.3)	1.9 (1.2-2.9)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)
5	81 (75-88)	64 (56-76)	44 (37-57)	28 (22-37)	16 (13-23)	9.3 (7.3-13)	5.2 (4.0-7.4)	2.9 (2.2-4.1)	1.6 (1.3-2.3)	0.9 (0.7-1.3)	0.5 (0.4-0.7)
6	89	77	58	39	24	14	7.8	4.3	2.5	1.4	0.8

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	17	11	6.2	3.7	2.1	1.2	0.7	0.4	0.3	0.2	0.1
1	25 (18-29)	16 (11-18)	9.5 (6.6-11)	5.6 (3.8-6.6)	3.3 (2.2-3.8)	1.9 (1.3-2.2)	1.1 (0.8-1.3)	0.6 (0.4-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
2	35 (25-45)	23 (15-30)	14 (9.2-19)	8.5 (5.4-12)	5.0 (3.2-6.9)	2.9 (1.8-4.0)	1.7 (1.1-2.4)	1.0 (0.6-1.4)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.3)
3	47 (35-60)	32 (22-43)	20 (14-29)	13 (8.1-18)	7.5 (4.8-11)	4.4 (2.8-6.5)	2.6 (1.6-3.9)	1.5 (0.9-2.3)	0.9 (0.6-1.4)	0.5 (0.3-0.8)	0.3 (0.2-0.5)
4	60 (49-72)	43 (34-56)	29 (21-40)	18 (13-26)	11 (7.9-16)	6.6 (4.6-9.8)	3.9 (2.7-5.8)	2.3 (1.6-3.4)	1.4 (1.0-2.1)	0.8 (0.6-1.3)	0.5 (0.3-0.8)
5	72 (66-80)	56 (50-67)	39 (34-50)	26 (22-34)	16 (14-22)	9.8 (8.1-14)	5.8 (4.8-8.2)	3.4 (2.8-4.8)	2.1 (1.7-2.9)	1.2 (1.0-1.8)	0.7 (0.6-1.1)
6	81	68	52	36	23	14	8.6	5.1	3.1	1.9	1.1

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

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	16	10	6.5	4.0	2.5	1.5	0.9	0.6	0.4	0.2	0.2
1	23 (17-26)	15 (11-17)	9.5 (6.8-11)	6.0 (4.2-7.0)	3.7 (2.6-4.4)	2.3 (1.6-2.7)	1.4 (1.0-1.7)	0.9 (0.6-1.0)	0.6 (0.4-0.7)	0.4 (0.3-0.4)	0.2 (0.2-0.3)
2	31 (23-39)	21 (15-27)	14 (9.5-18)	8.8 (5.9-11)	5.5 (3.7-7.2)	3.4 (2.3-4.5)	2.1 (1.4-2.8)	1.3 (0.9-1.7)	0.8 (0.6-1.1)	0.5 (0.4-0.7)	0.3 (0.2-0.5)
3	42 (32-51)	29 (22-37)	20 (14-26)	13 (8.9-17)	8.1 (5.6-11)	5.1 (3.5-7.1)	3.2 (2.1-4.4)	2.0 (1.3-2.8)	1.3 (0.9-1.8)	0.8 (0.5-1.1)	0.5 (0.3-0.7)
4	53 (45-63)	39 (32-49)	27 (21-36)	18 (14-25)	12 (8.9-16)	7.4 (5.6-11)	4.7 (3.5-6.7)	2.9 (2.2-4.2)	1.9 (1.4-2.7)	1.2 (0.9-1.7)	0.8 (0.6-1.1)
5	64 (60-72)	50 (46-60)	36 (33-46)	25 (22-33)	17 (14-22)	11 (9.1-15)	6.8 (5.8-9.3)	4.3 (3.6-5.9)	2.8 (2.3-3.8)	1.8 (1.5-2.5)	1.1 (0.9-1.6)
6	73	61	47	34	23	15	9.8	6.2	4.0	2.6	1.7

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	15	10	7.0	4.7	3.1	2.0	1.3	0.9	0.6	0.4	0.3
1	23 (21-29)	16 (14-21)	11 (9.8-14)	7.5 (6.5-9.6)	5.0 (4.3-6.4)	3.3 (2.9-4.3)	2.2 (1.9-2.8)	1.4 (1.2-1.9)	1.0 (0.8-1.3)	0.7 (0.6-0.9)	0.4 (0.4-0.6)
2	34 (29-41)	25 (21-31)	17 (14-22)	12 (9.8-15)	8.0 (6.5-11)	5.3 (4.3-7.1)	3.5 (2.8-4.7)	2.4 (1.9-3.2)	1.6 (1.3-2.2)	1.1 (0.9-1.5)	0.7 (0.6-1.0)
3	46 (39-53)	35 (29-42)	26 (21-31)	18 (14-23)	13 (9.8-16)	8.5 (6.6-11)	5.7 (4.4-7.2)	3.8 (2.9-4.9)	2.6 (2.0-3.3)	1.8 (1.3-2.3)	1.2 (0.9-1.5)
4	58 (51-64)	47 (40-54)	37 (30-42)	27 (21-32)	19 (15-23)	13 (9.9-16)	9.0 (6.7-11)	6.1 (4.5-7.3)	4.2 (3.1-5.0)	2.9 (2.1-3.5)	2.0 (1.4-2.4)
5	69 (62-72)	59 (52-63)	49 (41-52)	38 (31-41)	28 (22-31)	20 (16-22)	14 (11-16)	9.7 (7.4-11)	6.7 (5.1-7.5)	4.6 (3.5-5.2)	3.1 (2.4-3.6)
6	77	70	61	50	39	29	21	15	10	7.3	5.0

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

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	16	11	8.1	5.7	4.0	2.8	1.9	1.4	1.0	0.7	0.5
1	26 (21-47)	20 (15-37)	14 (11-29)	11 (8.0-22)	7.5 (5.6-16)	5.3 (3.9-11)	3.8 (2.7-8.1)	2.7 (2.0-5.9)	1.9 (1.4-4.3)	1.4 (1.0-3.1)	1.0 (0.7-2.2)
2	38 (27-58)	30 (21-48)	23 (15-39)	18 (11-31)	13 (7.9-23)	9.5 (5.6-17)	6.8 (3.9-13)	4.9 (2.8-9.3)	3.6 (2.0-6.8)	2.6 (1.4-5.0)	1.9 (1.0-3.6)
3	51 (35-66)	43 (27-59)	35 (21-50)	28 (15-41)	21 (11-32)	16 (8.0-25)	11 (5.7-18)	8.5 (4.1-14)	6.2 (3.0-10)	4.5 (2.1-7.4)	3.3 (1.5-5.4)
4	63 (45-73)	56 (36-67)	48 (29-59)	39 (22-50)	32 (16-41)	24 (12-32)	18 (8.4-25)	14 (6.2-19)	10 (4.5-14)	7.7 (3.2-10)	5.6 (2.3-7.7)
5	73 (55-79)	67 (46-73)	60 (38-67)	52 (30-59)	44 (23-50)	36 (17-41)	28 (13-32)	22 (9.4-25)	17 (7.0-19)	12 (5.1-14)	9.3 (3.7-11)
6	81	77	72	65	57	48	40	32	25	20	15

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	15	11	8.4	6.3	4.7	3.5	2.6	1.9	1.5	1.1	0.8
1	24 (19-44)	19 (14-36)	15 (11-29)	11 (8.1-23)	8.5 (6.1-18)	6.4 (4.5-14)	4.8 (3.4-11)	3.7 (2.6-8.1)	2.8 (1.9-6.2)	2.1 (1.5-4.8)	1.6 (1.1-3.6)
2	35 (24-54)	29 (19-47)	23 (14-39)	18 (11-32)	14 (8.3-25)	11 (6.2-20)	8.3 (4.7-16)	6.5 (3.6-12)	5.0 (2.7-9.5)	3.8 (2.1-7.3)	2.9 (1.6-5.6)
3	47 (31-63)	40 (24-56)	34 (19-49)	28 (15-42)	22 (11-34)	17 (8.6-28)	14 (6.5-22)	11 (5.0-18)	8.4 (3.9-14)	6.5 (3.0-11)	5.0 (2.3-8.4)
4	59 (39-70)	52 (32-64)	45 (26-57)	39 (21-50)	32 (16-43)	26 (12-35)	21 (9.6-29)	17 (7.5-23)	13 (5.8-19)	10 (4.5-15)	8.2 (3.4-12)
5	69 (49-75)	64 (42-70)	58 (35-64)	51 (29-57)	44 (23-50)	37 (18-42)	30 (14-35)	25 (11-29)	20 (8.6-24)	16 (6.7-19)	13 (5.2-15)
6	77	73	69	63	56	49	42	35	30	24	20

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

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	12	9.4	7.4	5.8	4.5	3.5	2.8	2.2	1.8	1.4	1.1
1	20 (15-38)	16 (12-32)	13 (9.5-26)	10 (7.5-22)	8.2 (5.9-17)	6.5 (4.6-14)	5.2 (3.6-11)	4.2 (2.9-9.2)	3.4 (2.3-7.4)	2.7 (1.9-6.0)	2.2 (1.5-4.8)
2	30 (19-48)	25 (16-42)	21 (12-36)	17 (10-30)	14 (7.9-25)	11 (6.2-20)	8.9 (4.9-16)	7.2 (4.0-13)	5.9 (3.2-11)	4.7 (2.6-8.9)	3.8 (2.1-7.2)
3	41 (25-57)	36 (21-51)	30 (17-45)	26 (14-39)	21 (11-33)	17 (8.6-28)	14 (6.9-23)	12 (5.6-19)	9.7 (4.5-16)	7.9 (3.6-13)	6.4 (2.9-11)
4	53 (33-65)	47 (28-59)	42 (23-54)	36 (19-47)	31 (15-41)	26 (12-35)	22 (10-30)	18 (8.1-25)	15 (6.6-21)	13 (5.4-18)	10 (4.3-15)
5	64 (43-70)	59 (37-65)	54 (32-60)	48 (26-54)	42 (22-48)	37 (18-42)	31 (15-36)	27 (12-31)	23 (9.8-27)	19 (8.0-23)	16 (6.5-19)
6	72	69	65	60	55	49	43	38	33	28	24

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	8.0	6.6	5.4	4.4	3.6	2.9	2.5	2.1	1.7	1.4	1.2
1	14 (10-28)	12 (8.5-24)	9.6 (7.0-20)	8.0 (5.8-17)	6.6 (4.7-14)	5.4 (3.8-12)	4.6 (3.2-10)	3.8 (2.7-8.5)	3.2 (2.3-7.2)	2.7 (1.9-6.1)	2.3 (1.6-5.1)
2	22 (13-37)	19 (11-33)	16 (9.2-28)	13 (7.6-24)	11 (6.3-20)	9.2 (5.2-17)	7.8 (4.3-15)	6.6 (3.6-12)	5.6 (3.1-11)	4.8 (2.6-9.0)	4.0 (2.2-7.6)
3	32 (18-46)	28 (15-41)	24 (13-37)	21 (11-32)	17 (8.7-28)	15 (7.2-24)	13 (6.0-21)	11 (5.1-18)	9.3 (4.3-15)	7.9 (3.6-13)	6.7 (3.1-11)
4	43 (24-54)	38 (21-50)	34 (18-45)	30 (15-40)	26 (12-35)	22 (10-31)	19 (8.7-27)	17 (7.4-24)	15 (6.3-20)	13 (5.3-18)	11 (4.5-15)
5	54 (33-60)	50 (29-56)	45 (25-52)	41 (21-47)	36 (18-42)	32 (15-37)	28 (13-33)	25 (11-29)	22 (9.3-26)	19 (7.9-22)	16 (6.7-20)
6	63	60	57	52	48	43	39	35	31	28	24