

Switzerland - 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 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	27	17	12	8.3	6.3	5.1	4.3	3.7	3.3	3.2	3.0
1	38 (33-47)	26 (23-32)	18 (15-22)	13 (10-16)	9.6 (7.3-12)	7.7 (5.5-9.7)	6.4 (4.4-8.4)	5.5 (3.7-7.4)	5.0 (3.2-6.8)	4.7 (3.0-6.6)	4.5 (2.9-6.3)
2	53 (42-67)	37 (30-49)	26 (21-35)	19 (14-25)	14 (9.5-21)	11 (7.0-18)	9.4 (5.4-15)	8.1 (4.4-14)	7.3 (3.9-12)	6.9 (3.6-12)	6.6 (3.4-12)
3	67 (53-80)	50 (38-62)	36 (27-47)	27 (18-38)	20 (13-32)	16 (9.2-27)	14 (7.1-24)	12 (5.8-21)	10 (5.0-19)	10 (4.7-19)	9.6 (4.4-18)
4	80 (67-88)	64 (49-75)	49 (35-57)	37 (25-47)	28 (19-39)	23 (15-34)	19 (12-30)	16 (9.4-26)	15 (8.1-24)	14 (7.5-23)	13 (7.1-23)
5	89 (83-92)	77 (68-84)	63 (52-68)	49 (39-56)	38 (30-46)	31 (24-40)	26 (20-34)	22 (17-31)	20 (15-28)	19 (14-27)	19 (13-26)
6	93	87	76	62	50	41	35	30	27	26	25

Ten year probability of osteoporotic 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	28	19	14	10	8.0	6.5	5.5	4.7	4.3	4.0	3.8
1	39 (36-46)	28 (25-33)	20 (17-24)	15 (12-18)	12 (8.8-14)	9.6 (6.8-12)	8.1 (5.5-11)	6.9 (4.6-9.4)	6.3 (4.2-8.8)	6.0 (3.9-8.3)	5.7 (3.6-8.0)
2	52 (44-65)	39 (32-49)	28 (22-37)	22 (16-30)	17 (11-25)	14 (8.6-21)	12 (6.8-19)	10 (5.6-16)	9.2 (5.0-15)	8.7 (4.6-15)	8.2 (4.3-14)
3	66 (55-76)	51 (41-62)	39 (30-52)	30 (21-43)	24 (15-37)	20 (11-32)	17 (8.9-28)	14 (7.3-25)	13 (6.4-23)	12 (5.9-22)	12 (5.6-22)
4	78 (67-85)	65 (51-72)	51 (39-61)	41 (30-52)	33 (23-45)	27 (18-40)	23 (14-35)	20 (12-31)	18 (10-29)	17 (9.4-28)	16 (8.8-27)
5	87 (82-90)	77 (69-81)	64 (55-70)	53 (44-61)	43 (35-52)	36 (29-46)	31 (25-40)	27 (20-36)	24 (18-34)	23 (16-32)	22 (15-31)
6	91	86	76	65	55	46	40	35	32	31	29

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	26	19	14	11	8.8	7.2	6.0	5.1	4.7	4.4	4.1
1	37 (34-42)	27 (24-31)	21 (17-24)	16 (13-19)	13 (9.6-16)	10 (7.5-14)	8.8 (6.1-12)	7.5 (5.0-10)	6.9 (4.6-9.5)	6.4 (4.2-9.0)	6.0 (3.9-8.5)
2	49 (42-59)	37 (31-46)	29 (23-37)	23 (16-31)	18 (12-26)	15 (9.4-23)	13 (7.5-20)	11 (6.1-17)	9.9 (5.5-16)	9.2 (5.0-15)	8.7 (4.6-14)
3	61 (51-70)	49 (40-60)	39 (30-52)	31 (22-44)	25 (16-38)	21 (12-33)	18 (9.8-29)	15 (8.0-26)	14 (7.1-24)	13 (6.5-23)	12 (6.0-22)
4	73 (62-78)	61 (50-70)	50 (39-61)	41 (31-53)	34 (25-47)	28 (19-41)	24 (15-36)	21 (13-32)	19 (11-30)	18 (10-29)	17 (9.3-27)
5	81 (76-85)	72 (66-78)	62 (55-69)	52 (45-61)	44 (37-53)	37 (31-47)	32 (25-42)	28 (21-37)	26 (19-35)	24 (17-33)	23 (16-31)
6	87	81	73	64	55	47	41	36	33	31	30

Ten year probability of osteoporotic 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	24	18	14	11	8.6	7.0	5.8	5.0	4.5	4.1	3.8
1	34 (31-37)	26 (22-29)	20 (17-22)	16 (12-18)	12 (9.4-15)	10 (7.4-13)	8.4 (5.9-11)	7.2 (4.9-9.7)	6.5 (4.4-9.0)	6.0 (3.9-8.4)	5.6 (3.6-7.9)
2	44 (38-52)	35 (29-42)	27 (22-34)	22 (16-29)	17 (12-24)	14 (9.4-21)	12 (7.4-18)	10 (6.1-16)	9.3 (5.3-15)	8.5 (4.7-14)	7.9 (4.3-13)
3	55 (47-63)	45 (37-55)	36 (29-47)	29 (21-41)	24 (16-35)	20 (12-30)	16 (9.7-27)	14 (7.9-24)	13 (6.9-22)	12 (6.2-21)	11 (5.6-20)
4	66 (57-71)	56 (46-64)	46 (37-56)	38 (30-49)	31 (24-43)	26 (19-37)	22 (15-33)	19 (12-29)	17 (11-28)	16 (9.4-26)	15 (8.5-24)
5	74 (70-78)	66 (60-71)	56 (51-64)	48 (42-56)	40 (35-49)	34 (29-43)	29 (24-38)	25 (20-34)	23 (17-32)	21 (15-30)	20 (14-28)
6	80	74	66	58	50	43	37	33	30	28	26

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	25	20	15	12	10	8.2	6.8	5.9	5.3	4.8	4.4
1	34 (29-40)	27 (22-32)	21 (17-26)	17 (13-21)	14 (10-17)	11 (8.3-13)	9.3 (6.7-11)	8.0 (5.7-9.5)	7.2 (5.0-8.6)	6.5 (4.5-7.8)	6.0 (4.1-7.2)
2	45 (37-54)	36 (29-45)	29 (22-37)	23 (17-30)	19 (14-25)	15 (11-21)	13 (8.5-17)	11 (7.1-15)	9.7 (6.2-13)	8.8 (5.5-12)	8.0 (4.9-11)
3	55 (46-65)	47 (37-57)	38 (29-49)	31 (23-41)	25 (18-35)	21 (14-29)	17 (11-25)	15 (9.3-22)	13 (8.1-20)	12 (7.1-18)	11 (6.4-16)
4	65 (57-72)	57 (48-65)	49 (39-58)	41 (32-50)	34 (25-43)	28 (20-36)	23 (16-31)	19 (14-27)	17 (12-25)	15 (10-23)	14 (9.4-21)
5	74 (68-78)	67 (60-73)	59 (52-66)	51 (44-58)	43 (36-51)	36 (30-43)	30 (24-37)	25 (21-32)	22 (18-29)	20 (16-27)	18 (15-24)
6	80	75	68	61	53	45	38	33	29	25	23

Ten year probability of osteoporotic 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	26	22	18	15	12	9.9	8.3	7.3	6.6	6.0	5.4
1	36 (28-52)	30 (23-44)	25 (19-36)	20 (15-29)	17 (12-23)	14 (9.8-19)	11 (8.0-15)	9.9 (6.9-12)	8.8 (6.1-10)	7.8 (5.4-9.3)	7.0 (4.9-8.5)
2	47 (36-62)	40 (29-54)	34 (24-46)	28 (19-39)	23 (16-32)	19 (13-26)	16 (10-21)	13 (8.7-18)	12 (7.6-15)	10 (6.7-13)	9.2 (5.9-12)
3	58 (44-70)	51 (37-63)	44 (31-56)	37 (25-49)	31 (20-42)	26 (16-35)	21 (13-29)	18 (11-25)	16 (9.9-22)	14 (8.7-19)	12 (7.7-17)
4	68 (53-76)	61 (46-71)	55 (39-65)	48 (33-58)	41 (27-51)	34 (22-43)	28 (18-36)	24 (16-32)	21 (14-27)	18 (12-24)	16 (11-21)
5	76 (62-80)	71 (55-76)	65 (49-71)	58 (42-65)	51 (36-59)	44 (31-52)	37 (26-44)	32 (23-39)	27 (20-34)	24 (18-30)	20 (16-26)
6	81	78	74	68	62	55	47	41	36	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	25	21	17	14	12	10	8.4	7.4	6.6	5.9	5.3
1	34 (26-49)	29 (22-43)	24 (18-36)	20 (15-30)	17 (12-25)	14 (10-20)	12 (8.3-16)	10 (7.2-14)	8.9 (6.2-12)	7.9 (5.5-9.9)	7.0 (4.9-8.5)
2	44 (33-59)	38 (28-52)	33 (23-45)	28 (19-39)	23 (16-33)	19 (13-27)	16 (11-23)	14 (9.2-19)	12 (7.9-17)	11 (6.9-14)	9.3 (6.1-12)
3	54 (41-67)	48 (35-61)	42 (30-54)	37 (25-48)	31 (21-41)	26 (17-35)	22 (14-30)	19 (12-26)	16 (10-22)	14 (9.1-20)	12 (8.0-17)
4	64 (50-73)	58 (44-68)	53 (38-62)	46 (32-56)	40 (27-50)	35 (23-43)	29 (19-37)	26 (17-33)	22 (14-29)	19 (13-25)	17 (11-22)
5	72 (58-77)	68 (52-73)	62 (46-69)	57 (40-64)	51 (35-58)	44 (30-51)	38 (26-45)	34 (23-40)	29 (20-35)	25 (18-31)	22 (16-27)
6	77	75	71	66	61	55	48	43	38	33	29

Ten year probability of osteoporotic 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	18	15	13	11	9.0	7.5	6.3	5.6	4.9	4.3	3.8
1	26 (20-42)	22 (17-36)	19 (14-31)	16 (11-26)	13 (9.4-21)	11 (7.7-18)	9.3 (6.5-15)	8.1 (5.6-13)	7.0 (4.8-11)	6.1 (4.2-9.0)	5.3 (3.6-7.7)
2	36 (26-51)	31 (22-45)	27 (18-39)	23 (15-34)	19 (12-29)	16 (10-24)	13 (8.7-20)	12 (7.5-17)	10 (6.4-15)	8.7 (5.5-13)	7.5 (4.8-11)
3	46 (32-60)	41 (28-54)	36 (24-49)	31 (20-43)	27 (17-37)	22 (14-32)	19 (12-27)	17 (10-23)	14 (8.6-20)	12 (7.4-17)	11 (6.4-15)
4	57 (40-67)	52 (35-62)	46 (31-57)	41 (26-51)	36 (22-45)	31 (18-39)	27 (16-34)	23 (14-30)	20 (12-26)	17 (10-23)	15 (8.9-20)
5	66 (49-71)	62 (44-68)	57 (38-63)	52 (33-58)	46 (29-53)	41 (24-47)	36 (21-42)	31 (18-37)	27 (16-33)	24 (14-29)	21 (12-25)
6	72	70	66	62	57	52	46	41	37	32	28

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	13	11	9.3	7.8	6.6	5.6	4.9	4.3	3.8	3.3	3.0
1	19 (14-31)	16 (12-27)	14 (9.9-23)	12 (8.3-20)	10 (7.0-17)	8.4 (5.9-14)	7.3 (5.1-12)	6.4 (4.4-11)	5.6 (3.9-9.3)	5.0 (3.4-8.1)	4.4 (3.0-7.0)
2	27 (18-40)	23 (16-36)	20 (13-31)	17 (11-27)	15 (9.4-23)	13 (7.9-20)	11 (6.9-17)	9.6 (6.0-15)	8.4 (5.2-13)	7.3 (4.6-11)	6.4 (4.0-9.9)
3	36 (24-49)	32 (20-44)	28 (18-40)	25 (15-35)	21 (13-31)	18 (11-27)	16 (9.4-23)	14 (8.2-21)	12 (7.2-18)	11 (6.2-16)	9.4 (5.4-14)
4	46 (30-57)	42 (27-52)	38 (23-48)	34 (20-43)	29 (17-38)	26 (15-34)	23 (13-30)	20 (11-27)	18 (9.8-24)	16 (8.6-21)	14 (7.5-18)
5	56 (38-62)	52 (34-59)	48 (30-55)	44 (26-50)	39 (23-45)	35 (19-41)	31 (17-37)	28 (15-33)	25 (13-30)	22 (12-26)	19 (10-23)
6	64	62	58	54	50	45	41	38	34	30	27