

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 body mass index (BMI kg/m²), 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.

Age = 50 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.7	3.5	3.4	3.0	2.6	2.3	2.0
1	5.8 (3.9-8.4)	5.5 (3.7-7.7)	5.3 (3.6-7.3)	4.6 (3.1-6.3)	4.1 (2.7-5.5)	3.6 (2.4-4.8)	3.1 (2.1-4.2)
2	9.1 (4.9-15)	8.4 (4.5-14)	8.1 (4.3-14)	7.1 (3.7-12)	6.2 (3.3-11)	5.4 (2.8-9.5)	4.7 (2.5-8.4)
3	14 (7.0-24)	13 (6.3-22)	12 (5.9-22)	11 (5.1-19)	9.3 (4.4-17)	8.1 (3.9-15)	7.1 (3.4-13)
4	21 (12-32)	19 (10-30)	18 (9.5-28)	15 (8.2-25)	14 (7.1-22)	12 (6.2-20)	10 (5.4-17)
5	30 (20-39)	27 (18-35)	25 (18-33)	22 (15-30)	20 (14-26)	17 (12-23)	15 (10-20)
6	43	38	35	31	27	24	21

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.9	4.7	4.6	4.0	3.5	3.1	2.7
1	7.6 (5.2-11)	7.2 (4.9-9.9)	7.1 (4.8-9.5)	6.2 (4.2-8.3)	5.4 (3.6-7.2)	4.7 (3.2-6.3)	4.1 (2.8-5.5)
2	12 (6.6-19)	11 (6.1-18)	11 (5.8-18)	9.3 (5.0-16)	8.1 (4.4-14)	7.1 (3.8-12)	6.2 (3.3-11)
3	18 (9.5-29)	16 (8.5-28)	16 (7.9-27)	14 (6.9-24)	12 (6.0-21)	10 (5.2-19)	9.2 (4.5-17)
4	26 (15-38)	24 (14-36)	22 (13-35)	20 (11-31)	17 (9.4-28)	15 (8.2-25)	13 (7.1-22)
5	36 (25-46)	33 (23-43)	31 (23-41)	28 (20-36)	24 (18-32)	21 (15-29)	19 (13-26)
6	49	45	43	38	34	30	26

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.8	5.5	5.4	4.7	4.1	3.5	3.1
1	8.9 (6.3-12)	8.4 (5.8-11)	8.2 (5.6-11)	7.1 (4.8-9.3)	6.2 (4.2-8.1)	5.4 (3.6-7.1)	4.7 (3.2-6.2)
2	14 (8.0-21)	13 (7.3-20)	12 (6.8-20)	11 (5.9-18)	9.2 (5.1-15)	8.0 (4.4-14)	7.0 (3.8-12)
3	20 (12-31)	19 (10-30)	18 (9.4-30)	15 (8.1-26)	13 (7.0-23)	12 (6.0-21)	10 (5.2-18)
4	29 (19-41)	26 (16-39)	25 (15-38)	22 (13-34)	19 (11-30)	17 (9.5-27)	15 (8.1-24)
5	39 (28-49)	37 (27-46)	35 (26-45)	31 (23-40)	27 (20-36)	24 (17-32)	21 (15-28)
6	52	49	47	41	37	32	29

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.2	5.8	5.6	4.8	4.2	3.6	3.1
1	9.5 (6.8-13)	8.8 (6.2-12)	8.5 (5.9-11)	7.3 (5.0-9.4)	6.3 (4.3-8.1)	5.4 (3.7-7.0)	4.7 (3.2-6.1)
2	14 (9.0-21)	13 (8.0-20)	13 (7.3-20)	11 (6.2-17)	9.3 (5.3-15)	8.0 (4.5-13)	6.9 (3.9-12)
3	21 (14-29)	19 (12-29)	18 (10-29)	16 (8.8-26)	14 (7.5-22)	12 (6.3-20)	10 (5.4-17)
4	29 (21-40)	27 (18-38)	26 (16-38)	22 (14-33)	19 (12-29)	17 (9.8-26)	14 (8.3-23)
5	39 (30-48)	37 (28-46)	35 (27-44)	31 (23-39)	27 (20-35)	23 (17-31)	20 (15-27)
6	50	48	46	41	36	31	27

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.8	7.4	7.2	6.2	5.3	4.5	3.9
1	12 (8.3-15)	11 (7.8-14)	10 (7.5-13)	8.9 (6.4-12)	7.5 (5.4-9.9)	6.4 (4.6-8.5)	5.5 (3.9-7.3)
2	17 (11-25)	16 (10-22)	15 (9.5-21)	13 (8.0-18)	11 (6.7-15)	9.1 (5.7-13)	7.7 (4.8-11)
3	25 (16-35)	23 (15-32)	21 (14-30)	18 (11-26)	15 (9.6-22)	13 (8.1-19)	11 (6.8-16)
4	34 (24-45)	32 (22-43)	29 (20-41)	25 (17-35)	21 (14-31)	18 (12-26)	15 (9.9-22)
5	45 (38-54)	42 (36-52)	40 (33-49)	34 (28-43)	29 (23-37)	25 (19-32)	21 (16-28)
6	56	54	52	45	39	34	29

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	10	10	10	8.5	7.2	6.1	5.2
1	16 (11-22)	15 (10-19)	14 (10-18)	12 (8.6-15)	10 (7.2-13)	8.5 (6.0-11)	7.1 (5.1-9.2)
2	23 (15-35)	22 (14-31)	20 (13-28)	17 (11-23)	14 (9.1-20)	12 (7.6-16)	9.9 (6.4-14)
3	33 (20-47)	31 (19-44)	29 (19-39)	24 (15-33)	20 (13-28)	17 (11-24)	14 (8.8-20)
4	44 (29-57)	42 (27-54)	39 (26-51)	33 (22-45)	28 (18-39)	23 (15-33)	20 (13-28)
5	56 (42-65)	53 (41-63)	51 (41-60)	44 (35-54)	38 (30-47)	32 (25-41)	27 (21-35)
6	67	65	63	56	50	43	37

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	12	12	9.7	8.1	6.8	5.7
1	19 (13-28)	18 (13-25)	17 (12-22)	14 (10-18)	12 (8.3-14)	9.6 (6.8-12)	8.0 (5.6-9.6)
2	27 (18-40)	26 (17-36)	24 (16-32)	20 (13-27)	16 (11-22)	14 (8.8-18)	11 (7.2-15)
3	38 (24-51)	35 (23-48)	33 (22-44)	28 (18-38)	23 (15-32)	19 (12-27)	16 (10-22)
4	49 (34-61)	46 (33-58)	44 (31-55)	38 (26-49)	32 (22-42)	27 (18-36)	22 (15-30)
5	60 (46-68)	58 (44-66)	55 (43-64)	49 (37-58)	42 (32-51)	36 (27-45)	30 (23-38)
6	69	68	66	60	53	47	40

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	11	11	8.7	7.1	5.7	4.7
1	20 (14-31)	18 (12-27)	16 (11-23)	13 (9.2-19)	11 (7.4-15)	8.6 (5.9-12)	6.9 (4.8-9.5)
2	29 (19-44)	26 (17-39)	24 (15-34)	19 (12-28)	16 (10-23)	13 (8.0-18)	10 (6.4-15)
3	40 (26-54)	37 (23-50)	33 (21-46)	28 (17-39)	23 (14-33)	19 (11-27)	15 (8.9-22)
4	52 (36-63)	48 (33-60)	45 (31-56)	38 (26-49)	32 (21-43)	27 (17-36)	22 (14-30)
5	62 (48-69)	60 (45-68)	57 (42-65)	50 (36-59)	43 (30-52)	37 (25-45)	31 (21-39)
6	68	69	67	62	55	48	42

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	12	10	9.5	7.7	6.1	4.9	4.0
1	19 (13-30)	16 (12-26)	15 (10-22)	12 (8.2-18)	9.5 (6.5-14)	7.6 (5.2-11)	6.0 (4.1-8.8)
2	28 (18-42)	25 (16-38)	22 (14-33)	18 (11-27)	14 (9.0-22)	12 (7.1-18)	9.2 (5.6-14)
3	39 (25-53)	35 (22-49)	32 (20-44)	26 (16-38)	21 (13-31)	17 (10-26)	14 (7.9-21)
4	50 (34-61)	47 (31-59)	43 (29-54)	37 (23-48)	31 (19-41)	25 (15-34)	20 (12-28)
5	58 (46-65)	58 (43-65)	55 (40-63)	48 (34-57)	42 (28-50)	35 (23-44)	29 (19-37)
6	63	66	65	60	53	47	40