

Switzerland - The probabilities of a hip fracture in women

The following tables give the 10-year probability (%) of a hip 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	1.0	0.5	0.3	0.2	0.2	0.1	0.1
1	2.0 (1.3-3.9)	1.1 (0.7-2.1)	0.6 (0.4-1.1)	0.5 (0.3-0.9)	0.4 (0.2-0.7)	0.3 (0.2-0.5)	0.2 (0.1-0.4)
2	3.9 (2.0-8.2)	2.1 (1.1-4.5)	1.1 (0.6-2.4)	0.9 (0.4-1.9)	0.7 (0.3-1.5)	0.5 (0.3-1.1)	0.4 (0.2-0.9)
3	7.2 (3.0-14)	4.0 (1.6-7.8)	2.2 (0.9-4.3)	1.7 (0.7-3.3)	1.3 (0.5-2.6)	1.0 (0.4-2.0)	0.8 (0.3-1.6)
4	13 (5.2-21)	7.3 (2.8-12)	4.0 (1.5-6.5)	3.1 (1.2-5.0)	2.4 (0.9-3.9)	1.9 (0.7-3.1)	1.5 (0.6-2.4)
5	22 (11-29)	13 (6.0-17)	7.1 (3.3-9.6)	5.6 (2.5-7.5)	4.4 (2.0-5.9)	3.4 (1.5-4.6)	2.6 (1.2-3.6)
6	36	22	12	9.8	7.7	6.0	4.7

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.6	0.9	0.5	0.4	0.3	0.2	0.2
1	3.1 (2.1-5.4)	1.7 (1.1-2.9)	0.9 (0.6-1.6)	0.7 (0.5-1.2)	0.5 (0.4-1.0)	0.4 (0.3-0.7)	0.3 (0.2-0.6)
2	5.8 (3.1-11)	3.2 (1.7-6.2)	1.7 (0.9-3.4)	1.3 (0.7-2.6)	1.0 (0.6-2.1)	0.8 (0.4-1.6)	0.6 (0.3-1.2)
3	10 (4.8-19)	5.8 (2.6-11)	3.1 (1.4-5.9)	2.4 (1.1-4.6)	1.9 (0.9-3.6)	1.5 (0.7-2.8)	1.2 (0.5-2.2)
4	18 (8.3-27)	10 (4.6-16)	5.6 (2.5-8.9)	4.4 (1.9-7.0)	3.4 (1.5-5.5)	2.7 (1.2-4.3)	2.1 (0.9-3.3)
5	30 (17-38)	17 (9.5-23)	9.9 (5.3-13)	7.8 (4.1-10)	6.1 (3.2-8.1)	4.8 (2.5-6.3)	3.7 (1.9-5.0)
6	46	29	17	13	11	8.3	6.5

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.7	1.5	0.8	0.6	0.5	0.4	0.3
1	5.0 (3.6-7.8)	2.8 (2.0-4.3)	1.5 (1.1-2.3)	1.2 (0.8-1.8)	0.9 (0.6-1.4)	0.7 (0.5-1.1)	0.5 (0.4-0.9)
2	8.9 (5.3-16)	5.0 (2.9-8.9)	2.7 (1.6-5.0)	2.1 (1.2-3.9)	1.6 (1.0-3.0)	1.3 (0.7-2.3)	1.0 (0.6-1.8)
3	15 (8.0-26)	8.7 (4.4-15)	4.9 (2.4-8.6)	3.8 (1.9-6.7)	3.0 (1.5-5.3)	2.3 (1.1-4.1)	1.8 (0.9-3.2)
4	25 (14-37)	15 (7.7-22)	8.5 (4.3-13)	6.6 (3.3-10)	5.2 (2.6-7.9)	4.1 (2.0-6.2)	3.2 (1.6-4.9)
5	40 (26-49)	25 (16-31)	14 (8.9-19)	11 (7.0-15)	8.9 (5.4-12)	7.0 (4.2-9.1)	5.5 (3.3-7.2)
6	58	39	24	19	15	12	9.3

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.8	2.7	1.5	1.1	0.9	0.7	0.5
1	8.3 (6.2-11)	4.7 (3.5-6.5)	2.6 (1.9-3.6)	2.0 (1.5-2.8)	1.6 (1.2-2.2)	1.2 (0.9-1.7)	0.9 (0.7-1.3)
2	14 (9.1-22)	8.1 (5.1-13)	4.5 (2.9-7.5)	3.5 (2.2-5.9)	2.8 (1.7-4.6)	2.1 (1.3-3.6)	1.7 (1.0-2.8)
3	23 (13-36)	14 (7.7-22)	7.8 (4.3-13)	6.1 (3.4-10)	4.8 (2.6-8.0)	3.7 (2.0-6.2)	2.9 (1.6-4.9)
4	36 (23-49)	22 (13-32)	13 (7.5-19)	10 (5.9-15)	8.1 (4.6-12)	6.3 (3.6-9.3)	4.9 (2.8-7.3)
5	52 (40-61)	35 (26-43)	21 (15-27)	17 (12-22)	13 (9.4-17)	11 (7.4-14)	8.3 (5.8-11)
6	69	51	34	27	22	17	14

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.8	5.0	2.8	2.2	1.7	1.3	1.0
1	15 (12-18)	9.1 (7.3-11)	5.2 (4.2-6.0)	4.0 (3.2-4.7)	3.1 (2.5-3.6)	2.4 (2.0-2.8)	1.9 (1.5-2.2)
2	26 (18-34)	16 (11-21)	9.4 (6.3-12)	7.3 (4.9-9.7)	5.7 (3.8-7.6)	4.5 (3.0-5.9)	3.5 (2.3-4.6)
3	41 (30-54)	27 (18-38)	16 (11-24)	13 (8.5-19)	10 (6.7-15)	8.0 (5.2-12)	6.3 (4.0-9.4)
4	59 (48-72)	43 (33-56)	28 (21-38)	22 (17-31)	18 (13-25)	14 (10-20)	11 (8.1-16)
5	75 (70-82)	62 (56-70)	44 (39-51)	37 (32-43)	30 (26-35)	24 (21-29)	19 (16-23)
6	85	79	64	55	47	39	32

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	16	9.8	5.7	4.5	3.5	2.7	2.1
1	28 (21-44)	18 (14-30)	11 (8.3-19)	8.8 (6.4-15)	6.9 (5.0-12)	5.3 (3.9-9.1)	4.1 (3.0-7.1)
2	45 (30-62)	32 (20-49)	21 (12-34)	16 (9.7-28)	13 (7.5-22)	10 (5.9-18)	8.0 (4.6-14)
3	62 (46-78)	49 (32-67)	35 (21-52)	29 (16-44)	23 (13-36)	18 (10-29)	15 (7.9-24)
4	76 (62-85)	68 (50-81)	54 (34-70)	46 (28-62)	38 (22-53)	31 (18-45)	25 (14-37)
5	84 (75-88)	81 (68-87)	73 (55-81)	65 (46-75)	57 (38-67)	49 (31-59)	41 (25-50)
6	88	88	86	82	76	69	60

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	24	16	10	7.8	6.1	4.7	3.6
1	38 (30-57)	28 (21-44)	18 (14-30)	15 (11-25)	11 (8.5-20)	8.9 (6.6-15)	7.0 (5.1-12)
2	54 (41-72)	43 (30-62)	31 (20-49)	25 (16-41)	20 (13-34)	16 (9.9-27)	13 (7.7-22)
3	67 (53-80)	60 (42-76)	47 (30-67)	40 (24-59)	33 (19-50)	27 (15-42)	22 (12-35)
4	78 (65-85)	73 (58-83)	65 (45-78)	57 (37-71)	49 (30-64)	42 (25-56)	35 (20-47)
5	84 (76-87)	82 (72-87)	79 (64-85)	73 (56-81)	66 (48-75)	59 (40-68)	51 (33-60)
6	86	87	87	84	80	74	68

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	28	21	14	11	8.3	6.5	5.0
1	42 (34-61)	34 (26-51)	24 (18-39)	19 (14-32)	15 (11-26)	12 (8.7-20)	9.3 (6.7-16)
2	57 (44-74)	49 (36-67)	38 (26-57)	32 (21-48)	26 (16-41)	21 (13-33)	16 (10-27)
3	69 (56-80)	63 (48-77)	55 (37-72)	47 (30-65)	40 (24-57)	33 (19-49)	27 (15-41)
4	77 (66-84)	75 (61-83)	70 (53-80)	63 (45-75)	56 (37-69)	48 (31-62)	41 (25-54)
5	81 (76-84)	82 (73-86)	80 (68-85)	76 (61-82)	70 (53-78)	63 (45-72)	56 (38-65)
6	80	85	86	84	80	76	70

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	26	20	14	11	8.5	6.6	5.0
1	40 (31-57)	32 (25-50)	24 (18-39)	19 (14-32)	15 (11-26)	12 (8.6-21)	9.3 (6.6-16)
2	53 (41-70)	46 (34-65)	38 (26-56)	31 (21-48)	25 (16-40)	20 (13-33)	16 (9.8-26)
3	65 (52-77)	60 (45-74)	53 (36-69)	46 (30-62)	38 (24-55)	32 (19-47)	26 (15-39)
4	73 (62-81)	71 (57-80)	67 (50-78)	60 (43-72)	53 (35-66)	46 (29-59)	39 (23-51)
5	76 (72-80)	78 (69-82)	77 (65-83)	73 (58-79)	67 (50-75)	60 (43-69)	53 (35-62)
6	73	80	83	81	77	72	67