Germany - 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 Germany. 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/m²)						
	15	20	25	30	35	40	45
0	0.9	0.5	0.3	0.2	0.2	0.1	0.1
1	1.8 (1.1-3.4)	0.9 (0.6-1.8)	0.5 (0.3-1.0)	0.4 (0.3-0.8)	0.3 (0.2-0.6)	0.2 (0.2-0.5)	0.2 (0.1-0.4)
2	3.4 (1.7-7.2)	1.8 (0.9-3.9)	1.0 (0.5-2.1)	0.8 (0.4-1.7)	0.6 (0.3-1.3)	0.5 (0.2-1.0)	0.4 (0.2-0.8)
3	6.4 (2.6-12)	3.5 (1.4-6.9)	1.9 (0.8-3.7)	1.5 (0.6-2.9)	1.1 (0.5-2.3)	0.9 (0.4-1.8)	0.7 (0.3-1.4)
4	11 (4.6-18)	6.4 (2.5-10)	3.5 (1.3-5.7)	2.7 (1.0-4.4)	2.1 (0.8-3.5)	1.6 (0.6-2.7)	1.3 (0.5-2.1)
5	20 (9.5-26)	11 (5.2-15)	6.2 (2.9-8.4)	4.9 (2.2-6.6)	3.8 (1.7-5.2)	3.0 (1.3-4.0)	2.3 (1.0-3.1)
6	33	19	11	8.6	6.7	5.3	4.1

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

Age = 55 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	1.3	0.7	0.4	0.3	0.2	0.2	0.1
1	2.4 (1.6-4.2)	1.3 (0.9-2.3)	0.7 (0.5-1.2)	0.6 (0.4-1.0)	0.4 (0.3-0.8)	0.3 (0.2-0.6)	0.3 (0.2-0.5)
2	4.5 (2.5-8.7)	2.5 (1.3-4.9)	1.3 (0.7-2.7)	1.0 (0.6-2.1)	0.8 (0.4-1.6)	0.6 (0.3-1.3)	0.5 (0.3-1.0)
3	8.1 (3.7-15)	4.5 (2.0-8.4)	2.5 (1.1-4.7)	1.9 (0.9-3.6)	1.5 (0.7-2.8)	1.2 (0.5-2.2)	0.9 (0.4-1.7)
4	14 (6.5-22)	8.1 (3.6-13)	4.5 (2.0-7.0)	3.5 (1.5-5.5)	2.7 (1.2-4.3)	2.1 (0.9-3.3)	1.6 (0.7-2.6)
5	24 (13-31)	14 (7.5-18)	7.8 (4.1-10)	6.1 (3.2-8.1)	4.8 (2.5-6.4)	3.7 (2.0-5.0)	2.9 (1.5-3.9)
6	38	23	13	11	8.3	6.5	5.1

Age = 60 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	2.1	1.2	0.6	0.5	0.4	0.3	0.2
1	3.8 (2.8-6.0)	2.1 (1.5-3.3)	1.2 (0.8-1.8)	0.9 (0.6-1.4)	0.7 (0.5-1.1)	0.5 (0.4-0.9)	0.4 (0.3-0.7)
2	6.9 (4.1-12)	3.8 (2.3-6.9)	2.1 (1.2-3.8)	1.6 (1.0-3.0)	1.3 (0.7-2.3)	1.0 (0.6-1.8)	0.8 (0.5-1.4)
3	12 (6.1-20)	6.8 (3.4-12)	3.8 (1.9-6.7)	2.9 (1.5-5.2)	2.3 (1.1-4.1)	1.8 (0.9-3.2)	1.4 (0.7-2.5)
4	20 (11-29)	12 (6.0-18)	6.6 (3.3-10)	5.2 (2.6-7.9)	4.0 (2.0-6.2)	3.1 (1.6-4.8)	2.4 (1.2-3.8)
5	32 (21-40)	19 (12-25)	11 (6.9-15)	8.9 (5.4-12)	6.9 (4.2-9.1)	5.4 (3.3-7.1)	4.2 (2.5-5.5)
6	48	31	19	15	12	9.2	7.2

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

Age = 65 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	3.8	2.1	1.2	0.9	0.7	0.6	0.4
1	6.6 (4.9-9.1)	3.8 (2.8-5.2)	2.1 (1.5-2.9)	1.6 (1.2-2.3)	1.3 (0.9-1.8)	1.0 (0.7-1.4)	0.8 (0.6-1.1)
2	11 (7.1-18)	6.5 (4.1-11)	3.7 (2.3-6.0)	2.8 (1.8-4.7)	2.2 (1.4-3.7)	1.7 (1.1-2.8)	1.3 (0.8-2.2)
3	18 (11-29)	11 (6.2-18)	6.3 (3.5-10)	4.9 (2.7-8.2)	3.8 (2.1-6.4)	3.0 (1.6-5.0)	2.3 (1.3-3.9)
4	29 (18-40)	18 (11-26)	11 (6.1-15)	8.3 (4.7-12)	6.5 (3.7-9.6)	5.1 (2.9-7.5)	3.9 (2.2-5.9)
5	43 (32-51)	29 (21-35)	17 (12-22)	14 (9.6-17)	11 (7.5-14)	8.5 (5.9-11)	6.7 (4.6-8.5)
6	59	43	28	22	18	14	11

Age = 70 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	7.3	4.3	2.4	1.9	1.5	1.1	0.9
1	13 (10-15)	7.7 (6.1-8.9)	4.4 (3.6-5.1)	3.5 (2.8-4.0)	2.7 (2.1-3.1)	2.1 (1.7-2.4)	1.6 (1.3-1.9)
2	22 (15-29)	14 (9.2-18)	8.0 (5.4-11)	6.3 (4.2-8.3)	4.9 (3.2-6.5)	3.8 (2.5-5.1)	2.9 (1.9-3.9)
3	35 (25-46)	23 (16-33)	14 (9.3-21)	11 (7.3-16)	8.7 (5.7-13)	6.8 (4.4-10)	5.3 (3.4-7.9)
4	51 (40-64)	37 (28-49)	24 (18-33)	19 (14-27)	15 (11-22)	12 (8.7-17)	9.4 (6.8-14)
5	67 (62-75)	54 (49-63)	39 (34-46)	32 (28-38)	26 (22-31)	20 (18-25)	16 (14-20)
6	79	72	57	49	41	33	27

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

Age = 75 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	12	7.8	4.7	3.6	2.8	2.2	1.7
1	22 (16-36)	15 (11-24)	9.1 (6.6-15)	7.1 (5.2-12)	5.5 (4.0-9.5)	4.3 (3.1-7.4)	3.3 (2.4-5.7)
2	36 (23-53)	26 (16-40)	17 (9.9-28)	13 (7.7-22)	10 (6.0-18)	8.1 (4.7-14)	6.3 (3.6-11)
3	52 (36-69)	41 (26-58)	29 (17-44)	23 (13-36)	19 (10-30)	15 (8.1-24)	12 (6.3-19)
4	67 (50-78)	58 (41-73)	46 (28-62)	38 (23-53)	31 (18-45)	26 (14-37)	20 (11-30)
5	78 (65-84)	73 (58-81)	64 (46-74)	57 (38-66)	49 (31-58)	41 (25-50)	34 (20-42)
6	85	83	80	74	67	59	51

Age = 80 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	17	12	7.7	6.0	4.6	3.6	2.7
1	28 (21-44)	21 (16-34)	14 (10-24)	11 (8.1-19)	8.6 (6.3-15)	6.7 (4.8-12)	5.2 (3.7-9.2)
2	41 (29-59)	33 (22-50)	24 (15-39)	19 (12-32)	15 (9.4-26)	12 (7.3-20)	9.4 (5.6-16)
3	55 (40-70)	48 (32-64)	38 (23-55)	31 (18-47)	25 (14-39)	20 (11-32)	16 (8.6-26)
4	67 (51-78)	62 (45-74)	54 (36-67)	46 (29-60)	39 (23-52)	32 (18-44)	26 (15-37)
5	77 (65-82)	74 (59-80)	69 (52-77)	62 (44-71)	55 (36-64)	47 (30-56)	40 (24-48)
6	82	82	80	75	69	62	55

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

Age = 85 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	19	14	9.7	7.5	5.8	4.4	3.4
1	30 (22-46)	23 (17-38)	17 (13-29)	14 (9.8-23)	11 (7.5-18)	8.2 (5.8-14)	6.3 (4.4-11)
2	43 (31-60)	36 (25-53)	28 (18-44)	23 (14-36)	18 (11-29)	14 (8.6-24)	11 (6.6-19)
3	56 (41-70)	50 (34-65)	42 (27-58)	35 (21-51)	29 (17-43)	23 (13-36)	18 (10-29)
4	67 (52-77)	63 (46-74)	57 (39-69)	50 (32-63)	42 (26-55)	35 (20-47)	29 (16-40)
5	75 (65-79)	74 (60-80)	70 (54-77)	64 (46-72)	57 (39-66)	49 (32-59)	42 (26-51)
6	77	80	79	75	70	63	56

Age = 90 years

Number of CRFs	BMI (kg/m²)						
	15	20	25	30	35	40	45
0	16	12	8.8	6.8	5.2	4.0	3.0
1	25 (19-40)	20 (15-34)	15 (11-26)	12 (8.5-21)	9.4 (6.5-17)	7.2 (5.0-13)	5.5 (3.8-10)
2	37 (26-54)	31 (21-48)	25 (16-40)	20 (13-33)	16 (9.7-27)	12 (7.5-21)	9.7 (5.7-17)
3	50 (35-64)	44 (30-59)	38 (24-53)	31 (19-46)	25 (15-38)	20 (11-31)	16 (8.7-25)
4	61 (45-72)	57 (40-69)	52 (34-64)	44 (28-57)	38 (22-50)	31 (17-42)	25 (14-35)
5	68 (58-73)	68 (54-74)	65 (48-72)	58 (41-67)	51 (34-60)	44 (27-53)	37 (22-46)
6	70	74	74	70	64	58	50