

**Germany - The probabilities of a hip fracture in women**

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 Germany. 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/m<sup>2</sup>.

**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	14	7.3	3.8	1.9	1.0	0.5	0.3	0.1	0.1	0.0	0.0	
1	21 (14-27)	12 (7.6-15)	6.0 (4.0-7.9)	3.1 (2.0-4.1)	1.6 (1.0-2.1)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.0)	
2	32 (20-45)	18 (11-26)	9.5 (5.6-14)	5.0 (2.9-7.6)	2.6 (1.5-3.9)	1.3 (0.8-2.0)	0.7 (0.4-1.0)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	
3	45 (29-64)	27 (16-41)	15 (8.4-24)	7.8 (4.4-13)	4.1 (2.2-6.7)	2.1 (1.2-3.5)	1.1 (0.6-1.8)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.0-0.1)	
4	60 (44-78)	38 (26-55)	22 (14-34)	12 (7.5-19)	6.3 (3.9-10)	3.3 (2.0-5.3)	1.7 (1.0-2.7)	0.9 (0.5-1.4)	0.5 (0.3-0.8)	0.2 (0.2-0.4)	0.1 (0.1-0.2)	
5	76 (66-88)	53 (43-67)	32 (25-44)	18 (14-26)	9.7 (7.2-14)	5.1 (3.7-7.4)	2.6 (1.9-3.8)	1.4 (1.0-2.0)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	
6	89	69	46	27	15	7.8	4.0	2.1	1.1	0.6	0.3	

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

**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	12	6.4	3.5	1.9	1.0	0.6	0.3	0.2	0.1	0.1	0.0
1	18 (12-22)	10 (6.8-12)	5.5 (3.7-6.8)	3.0 (2.0-3.7)	1.6 (1.1-2.0)	0.9 (0.6-1.1)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
2	27 (17-37)	15 (9.5-22)	8.6 (5.2-12)	4.7 (2.8-6.8)	2.6 (1.5-3.7)	1.4 (0.8-2.0)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	38 (25-54)	23 (14-34)	13 (7.8-20)	7.3 (4.3-11)	4.0 (2.3-6.3)	2.2 (1.2-3.5)	1.2 (0.7-1.9)	0.6 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	52 (39-69)	33 (23-47)	20 (13-29)	11 (7.3-17)	6.1 (4.0-9.5)	3.3 (2.2-5.2)	1.8 (1.2-2.8)	1.0 (0.6-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
5	67 (59-80)	46 (39-59)	29 (23-39)	17 (13-23)	9.3 (7.3-13)	5.1 (4.0-7.3)	2.8 (2.2-4.0)	1.5 (1.2-2.2)	0.9 (0.7-1.3)	0.5 (0.4-0.7)	0.3 (0.2-0.4)
6	81	61	40	24	14	7.7	4.2	2.4	1.3	0.7	0.4

**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	12	6.7	3.8	2.1	1.2	0.7	0.4	0.2	0.1	0.1	0.0
1	18 (12-21)	10 (7.0-12)	5.9 (4.0-7.0)	3.3 (2.2-3.9)	1.9 (1.3-2.2)	1.0 (0.7-1.2)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	26 (17-34)	15 (9.9-21)	9.0 (5.6-12)	5.1 (3.2-7.1)	2.9 (1.8-4.0)	1.6 (1.0-2.2)	0.9 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
3	37 (25-51)	23 (15-33)	13 (8.5-20)	7.8 (4.8-12)	4.4 (2.7-6.7)	2.5 (1.5-3.8)	1.4 (0.9-2.2)	0.8 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
4	50 (38-65)	32 (24-45)	20 (14-29)	12 (8.1-17)	6.7 (4.6-10)	3.8 (2.6-5.8)	2.2 (1.5-3.3)	1.3 (0.9-1.9)	0.7 (0.5-1.1)	0.4 (0.3-0.7)	0.2 (0.2-0.4)
5	64 (58-77)	45 (39-57)	29 (24-38)	17 (14-24)	10 (8.2-14)	5.7 (4.7-8.1)	3.3 (2.7-4.7)	1.9 (1.6-2.7)	1.1 (0.9-1.6)	0.6 (0.5-0.9)	0.4 (0.3-0.5)
6	78	59	40	25	15	8.5	4.9	2.9	1.7	1.0	0.6

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

**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	13	7.9	4.6	2.7	1.6	0.9	0.6	0.3	0.2	0.1	0.1
1	19 (14-23)	12 (8.3-14)	7.0 (4.9-8.4)	4.1 (2.9-5.0)	2.4 (1.7-2.9)	1.4 (1.0-1.7)	0.8 (0.6-1.0)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	28 (19-35)	17 (12-22)	11 (6.9-14)	6.3 (4.0-8.2)	3.7 (2.4-4.9)	2.1 (1.4-2.9)	1.3 (0.8-1.7)	0.8 (0.5-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	38 (27-50)	25 (17-34)	15 (10-22)	9.3 (6.1-13)	5.5 (3.6-8.0)	3.2 (2.1-4.7)	2.0 (1.3-2.9)	1.2 (0.8-1.7)	0.7 (0.5-1.1)	0.4 (0.3-0.6)	0.3 (0.2-0.4)
4	51 (41-64)	35 (27-47)	22 (17-31)	14 (10-20)	8.2 (5.9-12)	4.9 (3.5-7.1)	2.9 (2.1-4.4)	1.8 (1.3-2.7)	1.1 (0.8-1.6)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
5	64 (58-75)	47 (41-58)	31 (26-41)	20 (16-27)	12 (9.9-17)	7.2 (5.9-10)	4.4 (3.6-6.1)	2.7 (2.2-3.8)	1.6 (1.3-2.3)	1.0 (0.8-1.4)	0.6 (0.5-0.8)
6	77	60	42	28	17	10	6.4	3.9	2.4	1.4	0.9

**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	17	10	6.4	3.9	2.4	1.5	0.9	0.6	0.4	0.2	0.1
1	26 (23-32)	17 (14-21)	11 (9.0-13)	6.5 (5.6-8.2)	4.0 (3.4-5.1)	2.5 (2.1-3.1)	1.6 (1.3-2.0)	1.0 (0.8-1.3)	0.6 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
2	39 (32-49)	26 (21-34)	17 (13-23)	11 (8.3-14)	6.6 (5.1-9.0)	4.1 (3.2-5.7)	2.6 (2.0-3.6)	1.7 (1.3-2.3)	1.0 (0.8-1.4)	0.7 (0.5-0.9)	0.4 (0.3-0.6)
3	54 (45-63)	39 (30-48)	26 (20-34)	17 (13-22)	11 (7.8-14)	6.8 (4.9-9.2)	4.4 (3.1-5.9)	2.8 (2.0-3.8)	1.7 (1.2-2.4)	1.1 (0.8-1.5)	0.7 (0.5-1.0)
4	70 (60-75)	55 (44-62)	39 (31-46)	27 (20-32)	17 (13-21)	11 (8.0-14)	7.1 (5.1-9.0)	4.6 (3.3-5.8)	2.9 (2.1-3.7)	1.8 (1.3-2.3)	1.2 (0.8-1.5)
5	82 (76-84)	70 (62-74)	55 (47-60)	39 (32-44)	27 (21-30)	18 (14-20)	12 (9.1-13)	7.5 (5.8-8.6)	4.8 (3.7-5.5)	3.0 (2.4-3.5)	1.9 (1.5-2.2)
6	88	82	70	55	40	27	18	12	7.8	5.0	3.2

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

**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	20	13	8.5	5.5	3.5	2.3	1.5	1.0	0.7	0.4	0.3
1	33 (27-58)	23 (18-44)	16 (12-32)	11 (7.7-22)	6.9 (5.0-14)	4.6 (3.3-9.7)	3.1 (2.2-6.5)	2.0 (1.4-4.3)	1.3 (0.9-2.9)	0.9 (0.6-1.9)	0.6 (0.4-1.2)
2	50 (35-73)	38 (25-61)	27 (16-47)	19 (11-34)	13 (7.0-24)	8.6 (4.7-17)	5.8 (3.1-11)	3.8 (2.0-7.6)	2.6 (1.3-5.1)	1.7 (0.9-3.4)	1.1 (0.6-2.2)
3	66 (48-82)	54 (34-73)	42 (24-60)	31 (16-47)	21 (10-34)	15 (7.0-25)	10 (4.7-17)	7.0 (3.1-12)	4.7 (2.0-8.1)	3.1 (1.3-5.4)	2.1 (0.9-3.6)
4	78 (61-86)	69 (48-80)	58 (35-71)	46 (24-59)	34 (16-46)	25 (11-35)	17 (7.5-25)	12 (5.0-18)	8.2 (3.3-12)	5.5 (2.2-8.1)	3.7 (1.5-5.5)
5	86 (73-89)	81 (63-85)	73 (50-79)	63 (37-69)	50 (26-57)	38 (18-44)	28 (13-33)	20 (8.6-24)	14 (5.8-17)	9.5 (3.9-11)	6.4 (2.6-7.7)
6	89	88	84	77	67	55	43	32	23	16	11

**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	21	15	10	6.9	4.7	3.3	2.3	1.6	1.1	0.8	0.5
1	34 (26-59)	25 (19-47)	18 (13-36)	13 (9.0-26)	9.0 (6.2-19)	6.4 (4.3-14)	4.5 (3.0-9.6)	3.1 (2.1-6.8)	2.2 (1.5-4.7)	1.5 (1.0-3.3)	1.0 (0.7-2.3)
2	48 (35-70)	39 (25-61)	29 (18-50)	22 (12-39)	16 (8.6-29)	11 (6.1-22)	8.1 (4.3-16)	5.7 (3.0-11)	4.0 (2.1-8.0)	2.8 (1.4-5.7)	2.0 (1.0-4.0)
3	62 (45-78)	53 (35-71)	43 (26-62)	34 (18-51)	25 (13-40)	19 (9.1-31)	14 (6.4-23)	10 (4.5-17)	7.1 (3.1-12)	5.0 (2.2-8.6)	3.5 (1.5-6.1)
4	74 (57-83)	66 (46-78)	58 (35-70)	48 (26-61)	38 (19-50)	30 (14-41)	22 (9.8-32)	16 (7.0-24)	12 (4.9-18)	8.5 (3.4-13)	6.0 (2.4-9.1)
5	82 (67-86)	77 (58-82)	70 (48-76)	62 (38-69)	53 (29-60)	43 (21-50)	34 (16-41)	26 (11-32)	19 (8.1-24)	14 (5.8-18)	10 (4.1-13)
6	86	84	80	74	67	58	48	39	30	22	16

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

**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	13	9.7	7.0	5.1	3.8	2.8	2.0	1.5	1.1	0.8
1	30 (23-53)	23 (17-43)	17 (13-34)	13 (9.1-26)	9.6 (6.7-20)	7.2 (5.0-15)	5.3 (3.7-12)	4.0 (2.7-8.6)	2.9 (2.0-6.4)	2.1 (1.4-4.7)	1.6 (1.1-3.4)
2	43 (30-64)	35 (23-55)	27 (17-46)	21 (13-37)	16 (9.4-30)	13 (7.0-23)	9.5 (5.2-18)	7.1 (3.8-14)	5.3 (2.8-10)	3.9 (2.0-7.7)	2.9 (1.5-5.7)
3	56 (39-73)	48 (31-66)	40 (24-58)	32 (18-48)	26 (13-40)	20 (10-32)	16 (7.6-26)	12 (5.7-20)	9.1 (4.2-15)	6.8 (3.1-11)	5.0 (2.3-8.6)
4	68 (50-79)	61 (41-73)	54 (33-66)	45 (25-58)	38 (19-50)	31 (15-41)	25 (11-34)	19 (8.5-27)	15 (6.3-21)	11 (4.7-16)	8.5 (3.5-12)
5	77 (61-82)	73 (52-78)	66 (44-72)	59 (35-65)	52 (28-58)	44 (22-51)	36 (17-43)	29 (13-35)	23 (10-28)	18 (7.5-22)	14 (5.6-17)
6	82	80	77	71	65	58	50	42	34	27	21

**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	12	9.4	7.1	5.4	4.2	3.3	2.6	2.0	1.5	1.2	0.9
1	21 (16-40)	16 (12-33)	13 (9.2-26)	9.9 (7.1-21)	7.9 (5.5-17)	6.2 (4.3-13)	4.9 (3.4-11)	3.8 (2.6-8.3)	3.0 (2.0-6.5)	2.3 (1.6-5.1)	1.8 (1.2-3.9)
2	32 (21-51)	26 (16-43)	21 (13-36)	17 (9.8-30)	13 (7.8-25)	11 (6.1-20)	8.6 (4.7-16)	6.8 (3.7-13)	5.3 (2.9-10)	4.1 (2.2-8.1)	3.2 (1.7-6.3)
3	44 (28-61)	38 (22-54)	31 (17-47)	26 (14-40)	21 (11-34)	17 (8.6-28)	14 (6.8-23)	11 (5.3-19)	9.0 (4.2-15)	7.1 (3.3-12)	5.6 (2.5-9.4)
4	57 (37-69)	50 (30-63)	44 (25-56)	37 (20-49)	32 (16-43)	27 (13-36)	22 (10-30)	18 (8.0-25)	15 (6.3-20)	12 (4.9-16)	9.2 (3.8-13)
5	68 (47-73)	63 (40-69)	57 (34-63)	50 (28-57)	44 (23-51)	38 (19-44)	33 (15-38)	27 (12-32)	22 (9.6-27)	18 (7.6-22)	15 (6.0-18)
6	75	73	68	63	58	52	45	39	33	28	23