

France - 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 France. 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	10	5.3	2.8	1.4	0.7	0.4	0.2	0.1	0.1	0.0	0.0
1	16 (11-21)	8.5 (5.6-11)	4.4 (2.9-5.8)	2.3 (1.5-3.0)	1.2 (0.8-1.5)	0.6 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	24 (15-35)	13 (7.9-20)	7.0 (4.1-11)	3.6 (2.1-5.6)	1.9 (1.1-2.9)	1.0 (0.6-1.5)	0.5 (0.3-0.8)	0.3 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
3	36 (22-53)	20 (12-32)	11 (6.2-18)	5.8 (3.2-9.5)	3.0 (1.6-4.9)	1.5 (0.8-2.5)	0.8 (0.4-1.3)	0.4 (0.2-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	50 (35-68)	30 (20-44)	17 (10-26)	8.9 (5.5-14)	4.7 (2.8-7.4)	2.4 (1.5-3.9)	1.2 (0.7-2.0)	0.6 (0.4-1.0)	0.3 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	65 (55-79)	43 (34-56)	25 (19-34)	14 (10-19)	7.2 (5.3-10)	3.7 (2.7-5.4)	1.9 (1.4-2.8)	1.0 (0.7-1.5)	0.5 (0.4-0.8)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
6	81	58	36	20	11	5.7	3.0	1.5	0.8	0.4	0.2

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

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	9.5	5.2	2.8	1.5	0.8	0.4	0.2	0.1	0.1	0.0	0.0
1	15 (10-18)	8.2 (5.5-10)	4.5 (3.0-5.5)	2.4 (1.6-3.0)	1.3 (0.9-1.6)	0.7 (0.5-0.9)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	22 (14-31)	13 (7.7-18)	7.0 (4.2-10)	3.8 (2.3-5.5)	2.1 (1.2-3.0)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	32 (20-47)	19 (11-29)	11 (6.3-17)	5.9 (3.4-9.4)	3.2 (1.9-5.1)	1.7 (1.0-2.8)	0.9 (0.5-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
4	45 (33-62)	28 (19-41)	16 (11-24)	9.1 (5.9-14)	5.0 (3.2-7.8)	2.7 (1.7-4.2)	1.5 (0.9-2.3)	0.8 (0.5-1.3)	0.4 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)
5	60 (52-74)	40 (33-52)	24 (19-33)	14 (11-19)	7.6 (5.9-11)	4.1 (3.2-6.0)	2.2 (1.7-3.2)	1.2 (1.0-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
6	76	54	34	20	11	6.3	3.4	1.9	1.1	0.6	0.3

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	9.3	5.3	3.0	1.7	0.9	0.5	0.3	0.2	0.1	0.1	0.0
1	14 (9.8-17)	8.2 (5.6-9.7)	4.6 (3.1-5.5)	2.6 (1.8-3.1)	1.5 (1.0-1.7)	0.8 (0.5-1.0)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	21 (14-28)	12 (7.8-17)	7.1 (4.4-9.8)	4.0 (2.5-5.6)	2.3 (1.4-3.1)	1.3 (0.8-1.8)	0.7 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
3	30 (20-43)	18 (12-27)	11 (6.7-16)	6.2 (3.8-9.4)	3.5 (2.1-5.4)	2.0 (1.2-3.0)	1.1 (0.7-1.7)	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	42 (32-57)	27 (19-38)	16 (11-24)	9.3 (6.4-14)	5.3 (3.6-8.1)	3.0 (2.0-4.6)	1.7 (1.2-2.6)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
5	56 (50-70)	38 (32-49)	23 (20-32)	14 (11-19)	8.0 (6.5-11)	4.5 (3.7-6.4)	2.6 (2.1-3.7)	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	71	51	33	20	12	6.8	3.9	2.3	1.3	0.8	0.4

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

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	10	6.2	3.6	2.1	1.2	0.7	0.4	0.3	0.2	0.1	0.1
1	16 (11-18)	9.3 (6.5-11)	5.5 (3.8-6.6)	3.2 (2.2-3.9)	1.9 (1.3-2.3)	1.1 (0.7-1.3)	0.7 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
2	23 (15-29)	14 (9.1-18)	8.3 (5.4-11)	4.9 (3.1-6.6)	2.9 (1.8-3.9)	1.7 (1.1-2.3)	1.0 (0.6-1.4)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	32 (22-44)	20 (14-29)	12 (8.1-18)	7.4 (4.8-11)	4.3 (2.8-6.4)	2.5 (1.6-3.8)	1.5 (1.0-2.3)	0.9 (0.6-1.4)	0.6 (0.4-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	44 (34-58)	29 (22-40)	18 (13-26)	11 (7.9-16)	6.5 (4.6-9.6)	3.8 (2.7-5.7)	2.3 (1.6-3.4)	1.4 (1.0-2.1)	0.8 (0.6-1.3)	0.5 (0.4-0.8)	0.3 (0.2-0.5)
5	57 (51-70)	40 (34-51)	26 (21-34)	16 (13-22)	9.6 (7.8-13)	5.7 (4.6-8.0)	3.4 (2.8-4.9)	2.1 (1.7-2.9)	1.3 (1.0-1.8)	0.8 (0.6-1.1)	0.5 (0.4-0.7)
6	71	53	36	23	14	8.4	5.1	3.1	1.9	1.1	0.7

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	14	8.6	5.3	3.2	1.9	1.2	0.8	0.5	0.3	0.2	0.1
1	22 (19-27)	14 (12-17)	8.8 (7.4-11)	5.4 (4.5-6.8)	3.3 (2.8-4.1)	2.0 (1.7-2.5)	1.3 (1.1-1.6)	0.8 (0.7-1.0)	0.5 (0.4-0.6)	0.3 (0.3-0.4)	0.2 (0.2-0.3)
2	34 (27-43)	22 (18-29)	14 (11-19)	8.9 (6.8-12)	5.5 (4.2-7.5)	3.4 (2.6-4.7)	2.1 (1.6-2.9)	1.3 (1.0-1.9)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.3-0.5)
3	49 (39-60)	34 (26-44)	23 (17-30)	14 (10-19)	9.0 (6.4-12)	5.6 (4.0-7.7)	3.6 (2.5-4.9)	2.3 (1.6-3.1)	1.4 (1.0-2.0)	0.9 (0.6-1.2)	0.6 (0.4-0.8)
4	66 (55-73)	50 (39-58)	35 (26-42)	23 (17-28)	15 (11-18)	9.3 (6.7-12)	5.9 (4.2-7.5)	3.8 (2.7-4.8)	2.4 (1.7-3.0)	1.5 (1.1-1.9)	0.9 (0.7-1.2)
5	80 (74-84)	66 (58-71)	50 (42-55)	35 (28-39)	23 (18-26)	15 (12-17)	9.7 (7.6-11)	6.2 (4.9-7.2)	3.9 (3.1-4.6)	2.5 (1.9-2.9)	1.6 (1.2-1.8)
6	89	81	67	50	35	24	16	10	6.5	4.1	2.6

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

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	19	12	8.0	5.1	3.3	2.1	1.4	0.9	0.6	0.4	0.3
1	33 (26-58)	23 (17-43)	15 (11-30)	10 (7.2-21)	6.5 (4.6-14)	4.3 (3.0-9.1)	2.8 (2.0-6.0)	1.9 (1.3-4.0)	1.2 (0.9-2.6)	0.8 (0.6-1.7)	0.5 (0.4-1.1)
2	50 (34-75)	37 (23-62)	26 (16-47)	18 (10-34)	12 (6.5-23)	8.1 (4.3-16)	5.4 (2.9-11)	3.6 (1.9-7.2)	2.4 (1.2-4.8)	1.6 (0.8-3.1)	1.0 (0.5-2.1)
3	67 (47-84)	55 (33-74)	42 (23-62)	30 (15-48)	21 (9.8-34)	14 (6.5-24)	9.8 (4.3-17)	6.6 (2.9-12)	4.4 (1.9-7.8)	2.9 (1.2-5.2)	1.9 (0.8-3.4)
4	80 (62-89)	71 (48-83)	59 (34-74)	46 (24-61)	34 (16-47)	24 (11-34)	17 (7.1-25)	12 (4.7-17)	7.8 (3.1-12)	5.2 (2.1-7.8)	3.4 (1.4-5.2)
5	88 (77-91)	83 (65-88)	76 (51-82)	64 (37-72)	50 (26-58)	38 (18-45)	28 (12-33)	19 (8.4-23)	13 (5.6-16)	9.0 (3.7-11)	6.0 (2.5-7.4)
6	92	90	87	80	69	56	43	31	22	15	10

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	6.8	4.6	3.2	2.2	1.5	1.0	0.7	0.5
1	35 (27-61)	26 (19-48)	18 (13-36)	13 (8.9-26)	8.9 (6.0-19)	6.2 (4.2-13)	4.4 (2.9-9.3)	3.0 (2.0-6.5)	2.1 (1.4-4.5)	1.4 (0.9-3.1)	1.0 (0.7-2.1)
2	52 (36-76)	41 (26-65)	31 (18-53)	22 (12-40)	16 (8.5-30)	11 (5.9-22)	8.0 (4.1-16)	5.6 (2.8-11)	3.9 (2.0-7.9)	2.7 (1.3-5.5)	1.9 (0.9-3.8)
3	67 (48-83)	57 (36-76)	46 (26-66)	35 (18-54)	26 (13-42)	19 (8.9-32)	14 (6.2-24)	9.9 (4.3-17)	7.0 (3.0-12)	4.9 (2.0-8.8)	3.4 (1.4-6.2)
4	79 (62-87)	72 (49-83)	62 (38-76)	51 (27-66)	40 (20-55)	31 (14-44)	23 (9.9-34)	17 (7.0-25)	12 (4.8-18)	8.5 (3.4-13)	6.0 (2.3-9.3)
5	86 (74-89)	82 (65-87)	76 (53-82)	67 (41-75)	57 (31-65)	46 (23-55)	36 (17-43)	27 (12-33)	20 (8.4-25)	14 (5.9-18)	10 (4.1-13)
6	89	88	85	80	73	63	52	41	31	23	17

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

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	21	15	11	7.8	5.7	4.2	3.0	2.2	1.6	1.2	0.8
1	34 (26-59)	26 (19-48)	19 (14-38)	14 (10-29)	11 (7.4-22)	7.9 (5.4-17)	5.9 (4.0-12)	4.3 (2.9-9.2)	3.1 (2.1-6.8)	2.3 (1.5-5.0)	1.7 (1.1-3.6)
2	49 (34-71)	40 (26-62)	31 (19-52)	24 (14-42)	18 (10-34)	14 (7.6-26)	11 (5.6-20)	7.8 (4.1-15)	5.8 (3.0-11)	4.2 (2.2-8.5)	3.1 (1.6-6.2)
3	63 (45-79)	54 (36-73)	46 (27-64)	37 (20-55)	29 (15-45)	23 (11-37)	18 (8.4-29)	13 (6.2-22)	10 (4.5-17)	7.5 (3.3-13)	5.5 (2.4-9.6)
4	74 (57-84)	68 (48-79)	60 (38-73)	51 (29-65)	43 (22-56)	35 (17-48)	28 (13-39)	22 (9.6-31)	17 (7.1-24)	13 (5.2-19)	9.4 (3.8-14)
5	82 (68-86)	78 (60-83)	73 (51-78)	66 (41-72)	58 (33-66)	50 (26-58)	42 (20-49)	34 (15-40)	26 (12-32)	20 (8.7-25)	15 (6.4-19)
6	86	85	82	78	72	65	57	48	40	31	24

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	17	13	9.7	7.4	5.7	4.4	3.4	2.6	2.0	1.5	1.2
1	28 (21-51)	22 (17-42)	17 (13-34)	13 (9.6-28)	11 (7.5-22)	8.4 (5.8-18)	6.5 (4.5-14)	5.1 (3.4-11)	3.9 (2.6-8.4)	3.0 (2.0-6.5)	2.3 (1.5-5.0)
2	41 (29-63)	34 (22-55)	28 (17-47)	22 (13-39)	18 (10-33)	15 (8.1-27)	12 (6.3-22)	9.1 (4.9-17)	7.1 (3.7-14)	5.5 (2.9-11)	4.2 (2.2-8.4)
3	55 (38-72)	48 (30-66)	41 (24-59)	34 (19-51)	29 (15-44)	23 (12-37)	19 (9.4-31)	15 (7.3-25)	12 (5.6-20)	9.5 (4.3-16)	7.4 (3.3-12)
4	68 (49-78)	62 (41-74)	55 (33-68)	48 (27-61)	42 (22-54)	35 (17-47)	30 (14-40)	24 (11-34)	20 (8.5-28)	16 (6.6-23)	12 (5.1-18)
5	77 (60-82)	73 (53-78)	68 (45-74)	62 (38-68)	56 (32-63)	49 (26-57)	43 (21-50)	36 (17-43)	30 (14-36)	25 (11-30)	20 (8.4-24)
6	82	81	78	74	69	64	57	50	43	37	30