The Czech Republic - 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 the Czech Republic. 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	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)	6.1 (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 (8.4-23)	7.8 (4.4-13)	4.1 (2.3-6.7)	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)	6.4 (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 the Czech Republic.

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	14	7.7	4.2	2.3	1.2	0.7	0.4	0.2	0.1	0.1	0.0
1	21 (15-25)	12 (8.1-15)	6.6 (4.4-8.1)	3.6 (2.4-4.4)	1.9 (1.3-2.4)	1.0 (0.7-1.3)	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	31 (20-42)	18 (11-26)	10 (6.2-15)	5.6 (3.4-8.1)	3.1 (1.8-4.5)	1.7 (1.0-2.4)	0.9 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	44 (29-60)	27 (17-40)	16 (9.3-24)	8.7 (5.1-14)	4.8 (2.8-7.6)	2.6 (1.5-4.1)	1.4 (0.8-2.2)	0.8 (0.5-1.3)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)
4	58 (44-75)	38 (27-54)	23 (16-34)	13 (8.7-20)	7.3 (4.8-11)	4.0 (2.6-6.3)	2.2 (1.4-3.4)	1.2 (0.8-1.9)	0.7 (0.4-1.1)	0.4 (0.2-0.6)	0.2 (0.1-0.3)
5	73 (66-85)	52 (44-66)	33 (27-44)	20 (16-27)	11 (8.7-16)	6.1 (4.8-8.8)	3.3 (2.6-4.8)	1.9 (1.4-2.7)	1.0 (0.8-1.5)	0.6 (0.5-0.8)	0.3 (0.3-0.5)
6	86	68	46	28	16	9.2	5.0	2.8	1.6	0.9	0.5

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	14	8.1	4.6	2.6	1.5	0.8	0.5	0.3	0.2	0.1	0.1
1	21 (15-25)	12 (8.5-15)	7.1 (4.9-8.4)	4.0 (2.7-4.8)	2.3 (1.5-2.7)	1.3 (0.9-1.5)	0.7 (0.5-0.9)	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	31 (20-40)	19 (12-25)	11 (6.8-15)	6.2 (3.9-8.5)	3.5 (2.2-4.9)	2.0 (1.2-2.7)	1.1 (0.7-1.6)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	43 (29-57)	27 (18-38)	16 (10-24)	9.4 (5.8-14)	5.4 (3.3-8.2)	3.0 (1.8-4.6)	1.7 (1.1-2.7)	1.0 (0.6-1.5)	0.6 (0.4-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	56 (44-72)	38 (28-52)	24 (17-34)	14 (9.8-21)	8.1 (5.6-12)	4.6 (3.2-7.0)	2.6 (1.8-4.0)	1.5 (1.0-2.4)	0.9 (0.6-1.4)	0.5 (0.4-0.8)	0.3 (0.2-0.5)
5	71 (65-82)	51 (45-64)	33 (29-44)	20 (17-28)	12 (10-17)	6.9 (5.7-9.8)	4.0 (3.3-5.7)	2.3 (1.9-3.3)	1.3 (1.1-1.9)	0.8 (0.6-1.1)	0.5 (0.4-0.7)
6	83	66	46	29	18	10	6.0	3.5	2.0	1.2	0.7

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

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	15	9.0	5.3	3.1	1.8	1.1	0.6	0.4	0.2	0.1	0.1
1	22 (16-26)	13 (9.5-16)	8.1 (5.6-9.6)	4.8 (3.3-5.7)	2.8 (1.9-3.3)	1.6 (1.1-2.0)	1.0 (0.7-1.2)	0.6 (0.4-0.7)	0.4 (0.2-0.4)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
2	31 (22-39)	20 (13-25)	12 (7.9-16)	7.2 (4.7-9.4)	4.2 (2.7-5.6)	2.5 (1.6-3.3)	1.5 (1.0-2.0)	0.9 (0.6-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
3	42 (31-55)	28 (19-38)	18 (12-25)	11 (7.0-15)	6.3 (4.1-9.2)	3.7 (2.4-5.4)	2.3 (1.5-3.3)	1.4 (0.9-2.0)	0.8 (0.5-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
4	55 (46-69)	39 (30-51)	25 (19-35)	16 (11-22)	9.4 (6.8-14)	5.6 (4.0-8.2)	3.4 (2.4-5.0)	2.1 (1.5-3.0)	1.2 (0.9-1.8)	0.7 (0.5-1.1)	0.5 (0.3-0.7)
5	68 (63-79)	51 (45-63)	35 (30-45)	22 (19-30)	14 (11-19)	8.2 (6.7-11)	5.0 (4.1-7.0)	3.1 (2.5-4.3)	1.9 (1.5-2.6)	1.1 (0.9-1.6)	0.7 (0.6-1.0)
6	80	64	47	31	20	12	7.4	4.5	2.8	1.7	1.0

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	11	6.8	4.2	2.5	1.6	1.0	0.6	0.4	0.2	0.2
1	27 (24-33)	18 (15-22)	11 (9.5-14)	6.9 (5.9-8.7)	4.2 (3.6-5.4)	2.6 (2.2-3.3)	1.7 (1.4-2.1)	1.0 (0.9-1.3)	0.7 (0.6-0.8)	0.4 (0.4-0.5)	0.3 (0.2-0.3)
2	40 (33-50)	27 (22-35)	18 (14-23)	11 (8.8-15)	7.0 (5.4-9.5)	4.4 (3.4-6.0)	2.8 (2.1-3.8)	1.8 (1.3-2.4)	1.1 (0.8-1.5)	0.7 (0.5-1.0)	0.4 (0.3-0.6)
3	55 (46-64)	40 (32-49)	27 (21-35)	18 (13-23)	11 (8.3-15)	7.2 (5.2-9.6)	4.6 (3.3-6.2)	2.9 (2.1-3.9)	1.8 (1.3-2.5)	1.2 (0.8-1.6)	0.7 (0.5-1.0)
4	70 (61-76)	56 (46-62)	40 (32-47)	28 (21-33)	18 (13-22)	12 (8.5-14)	7.5 (5.4-9.4)	4.8 (3.5-6.0)	3.1 (2.2-3.9)	1.9 (1.4-2.5)	1.2 (0.9-1.6)
5	81 (75-83)	70 (63-74)	56 (47-60)	41 (33-45)	28 (22-31)	18 (15-21)	12 (9.5-14)	7.8 (6.1-9.1)	5.0 (3.9-5.8)	3.2 (2.5-3.7)	2.0 (1.6-2.4)
6	87	81	70	56	41	28	19	13	8.2	5.2	3.3

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

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	14	8.9	5.8	3.7	2.5	1.6	1.1	0.7	0.5	0.3
1	34 (27-59)	24 (19-45)	17 (12-33)	11 (8.1-23)	7.2 (5.2-15)	4.8 (3.5-10)	3.2 (2.3-6.9)	2.1 (1.5-4.6)	1.4 (1.0-3.0)	0.9 (0.7-2.0)	0.6 (0.4-1.3)
2	50 (36-72)	38 (25-61)	28 (17-48)	19 (11-35)	13 (7.4-25)	8.9 (4.9-17)	6.0 (3.3-12)	4.0 (2.2-8.0)	2.7 (1.4-5.3)	1.8 (0.9-3.6)	1.2 (0.6-2.4)
3	65 (48-80)	54 (36-72)	42 (25-60)	31 (17-47)	22 (11-35)	16 (7.4-25)	11 (4.9-18)	7.3 (3.3-12)	4.9 (2.2-8.4)	3.3 (1.4-5.7)	2.2 (0.9-3.8)
4	77 (61-85)	69 (48-79)	58 (35-70)	46 (25-59)	35 (17-46)	25 (12-35)	18 (7.9-26)	13 (5.3-18)	8.5 (3.5-12)	5.8 (2.3-8.5)	3.8 (1.5-5.7)
5	84 (72-88)	79 (62-84)	72 (50-78)	62 (37-68)	50 (27-57)	39 (19-45)	29 (13-34)	21 (8.9-24)	14 (6.0-17)	9.8 (4.0-12)	6.7 (2.7-8.0)
6	88	86	82	76	66	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	22	16	11	7.5	5.2	3.6	2.5	1.8	1.2	0.8	0.6
1	35 (28-60)	27 (20-49)	19 (14-38)	14 (9.7-28)	9.7 (6.7-20)	6.9 (4.7-15)	4.9 (3.3-10)	3.4 (2.3-7.4)	2.4 (1.6-5.2)	1.7 (1.1-3.6)	1.2 (0.8-2.5)
2	50 (36-71)	40 (27-61)	31 (19-51)	23 (13-40)	17 (9.4-31)	12 (6.6-23)	8.8 (4.7-17)	6.2 (3.3-12)	4.4 (2.3-8.7)	3.1 (1.6-6.2)	2.1 (1.1-4.3)
3	63 (46-77)	54 (36-71)	44 (27-62)	35 (20-52)	27 (14-41)	20 (9.9-32)	15 (7.0-24)	11 (4.9-18)	7.7 (3.4-13)	5.4 (2.4-9.3)	3.8 (1.7-6.6)
4	73 (57-82)	66 (47-77)	58 (37-70)	49 (28-62)	39 (20-51)	31 (15-42)	24 (11-33)	18 (7.6-25)	13 (5.3-19)	9.2 (3.7-14)	6.6 (2.6-9.8)
5	80 (67-84)	76 (58-81)	70 (49-76)	62 (39-68)	53 (30-60)	44 (23-51)	35 (17-42)	27 (12-33)	21 (8.7-25)	15 (6.2-19)	11 (4.4-14)
6	85	83	79	73	67	59	50	40	31	24	17

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

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	20	15	11	7.7	5.6	4.2	3.1	2.3	1.6	1.2	0.9
1	32 (25-55)	25 (19-46)	19 (14-36)	14 (9.9-28)	10 (7.4-22)	7.9 (5.5-17)	5.9 (4.0-13)	4.3 (3.0-9.4)	3.2 (2.2-7.0)	2.3 (1.6-5.1)	1.7 (1.2-3.8)
2	45 (33-66)	37 (25-57)	29 (19-49)	23 (14-39)	18 (10-32)	14 (7.6-25)	10 (5.7-20)	7.8 (4.2-15)	5.8 (3.1-11)	4.3 (2.2-8.4)	3.2 (1.6-6.3)
3	58 (41-74)	50 (33-67)	42 (25-60)	34 (19-51)	28 (15-43)	22 (11-35)	17 (8.4-28)	13 (6.2-22)	9.9 (4.6-17)	7.4 (3.4-12)	5.5 (2.5-9.4)
4	69 (52-79)	63 (43-74)	55 (35-68)	47 (27-60)	40 (21-52)	33 (16-44)	27 (12-36)	21 (9.3-29)	16 (6.9-23)	12 (5.1-18)	9.3 (3.8-14)
5	77 (62-82)	73 (54-78)	67 (46-73)	61 (37-67)	54 (30-60)	46 (24-53)	39 (19-45)	31 (14-37)	25 (11-30)	20 (8.2-24)	15 (6.1-18)
6	82	80	77	72	66	60	52	44	37	30	23

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	14	10	7.9	6.1	4.8	3.7	2.9	2.2	1.7	1.3	1.0
1	23 (17-42)	18 (13-35)	14 (10-29)	11 (7.9-23)	8.8 (6.2-19)	6.9 (4.9-15)	5.5 (3.8-12)	4.3 (2.9-9.3)	3.3 (2.3-7.3)	2.6 (1.8-5.7)	2.0 (1.4-4.4)
2	34 (23-54)	28 (18-46)	23 (14-39)	18 (11-32)	15 (8.7-27)	12 (6.8-22)	9.5 (5.3-18)	7.5 (4.2-14)	5.9 (3.2-11)	4.7 (2.5-9.0)	3.6 (1.9-7.1)
3	46 (30-63)	40 (24-56)	33 (19-49)	28 (15-42)	23 (12-36)	19 (9.5-30)	16 (7.6-25)	13 (6.0-21)	10 (4.7-17)	7.9 (3.6-13)	6.2 (2.8-11)
4	59 (39-70)	52 (32-65)	46 (26-58)	40 (21-51)	34 (17-45)	29 (14-39)	24 (11-33)	20 (8.9-27)	16 (7.0-22)	13 (5.5-18)	10 (4.3-15)
5	69 (49-74)	64 (42-70)	58 (36-65)	52 (29-58)	47 (25-53)	41 (20-47)	35 (16-41)	29 (13-35)	24 (11-29)	20 (8.4-24)	16 (6.7-20)
6	76	73	70	65	59	54	48	41	35	30	25