

The Czech Republic - The probabilities of a major osteoporotic fracture in men

The following tables give the 10-year probability (%) of a major osteoporotic fracture (hip, clinical spine, forearm or proximal humerus 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	21	13	8.6	5.9	4.3	3.3	2.7	2.3	2.1	1.9	1.9	
1	32 (26-39)	20 (18-26)	13 (12-17)	9.0 (7.5-11)	6.5 (5.1-8.2)	5.0 (3.7-6.3)	4.1 (2.8-5.3)	3.5 (2.3-4.6)	3.1 (2.0-4.2)	2.9 (1.9-4.1)	2.8 (1.8-3.9)	
2	44 (34-58)	29 (23-40)	20 (15-27)	13 (10-19)	9.7 (6.8-14)	7.5 (4.8-11)	6.1 (3.6-9.8)	5.1 (2.8-8.6)	4.5 (2.4-7.8)	4.3 (2.2-7.5)	4.1 (2.1-7.2)	
3	58 (44-71)	41 (30-53)	28 (20-36)	20 (14-27)	14 (9.1-22)	11 (6.4-18)	8.8 (4.7-15)	7.4 (3.7-13)	6.6 (3.2-12)	6.2 (2.9-12)	5.9 (2.7-11)	
4	71 (57-81)	54 (40-65)	39 (27-47)	28 (19-35)	20 (13-28)	16 (10-23)	13 (7.7-20)	11 (6.0-17)	9.3 (5.1-16)	8.8 (4.6-15)	8.4 (4.3-14)	
5	82 (74-87)	68 (57-76)	51 (41-58)	38 (29-43)	28 (21-34)	22 (16-27)	17 (13-23)	15 (11-20)	13 (9.5-18)	12 (8.6-17)	12 (8.0-17)	
6	89	79	65	50	38	29	24	20	18	17	16	

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	22	14	9.3	6.5	4.8	3.7	3.0	2.5	2.2	2.1	1.9
1	31 (26-37)	21 (19-25)	14 (12-17)	9.7 (8.1-12)	7.1 (5.6-8.7)	5.5 (4.1-6.7)	4.4 (3.1-5.7)	3.7 (2.5-4.9)	3.3 (2.2-4.5)	3.1 (2.0-4.3)	2.9 (1.8-4.1)
2	43 (34-54)	29 (24-39)	20 (16-27)	14 (11-19)	10 (7.5-15)	8.0 (5.3-12)	6.4 (3.9-10)	5.4 (3.1-8.8)	4.8 (2.6-8.1)	4.5 (2.4-7.6)	4.2 (2.2-7.3)
3	55 (44-66)	40 (31-50)	29 (21-36)	20 (15-28)	15 (10-22)	12 (7.1-19)	9.3 (5.2-16)	7.7 (4.0-14)	6.9 (3.4-13)	6.4 (3.1-12)	6.0 (2.8-11)
4	68 (56-76)	53 (40-61)	39 (28-45)	28 (20-35)	21 (15-28)	16 (11-24)	13 (8.4-20)	11 (6.5-17)	9.7 (5.5-16)	9.0 (4.9-15)	8.5 (4.5-14)
5	78 (71-83)	65 (56-71)	50 (42-56)	38 (31-43)	29 (23-35)	22 (18-28)	18 (14-24)	15 (12-20)	13 (9.9-19)	12 (8.8-18)	12 (8.1-17)
6	85	76	62	49	38	30	24	20	18	17	16

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	20	14	9.6	7.0	5.3	4.1	3.3	2.8	2.5	2.3	2.1
1	28 (25-33)	20 (18-23)	14 (12-17)	10 (8.5-12)	7.8 (6.1-9.2)	6.1 (4.5-7.5)	4.9 (3.5-6.3)	4.1 (2.8-5.4)	3.7 (2.4-5.0)	3.4 (2.2-4.7)	3.1 (2.0-4.4)
2	38 (31-47)	28 (23-35)	20 (16-26)	15 (11-19)	11 (8.1-15)	8.8 (5.9-13)	7.1 (4.4-11)	5.9 (3.5-9.4)	5.3 (3.0-8.7)	4.9 (2.7-8.2)	4.5 (2.4-7.7)
3	50 (40-58)	37 (29-45)	28 (22-35)	21 (16-28)	16 (11-23)	12 (7.8-19)	10 (5.9-17)	8.3 (4.6-14)	7.5 (3.9-13)	6.9 (3.5-13)	6.4 (3.1-12)
4	61 (51-68)	48 (38-55)	37 (28-44)	28 (21-36)	22 (16-29)	17 (12-25)	14 (9.3-21)	12 (7.2-18)	10 (6.1-17)	9.6 (5.4-16)	8.9 (4.9-15)
5	71 (65-75)	59 (52-64)	47 (40-52)	37 (31-43)	29 (24-35)	23 (19-29)	19 (15-25)	16 (12-21)	14 (11-20)	13 (9.3-19)	12 (8.4-17)
6	78	69	58	47	38	30	25	21	19	17	16

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	19	14	10	7.6	5.8	4.6	3.7	3.1	2.8	2.5	2.3
1	26 (24-29)	19 (17-22)	14 (12-16)	11 (8.9-12)	8.4 (6.6-9.9)	6.6 (5.0-8.2)	5.4 (3.9-6.9)	4.5 (3.1-6.0)	4.1 (2.7-5.5)	3.7 (2.4-5.1)	3.4 (2.2-4.8)
2	35 (29-42)	26 (22-32)	20 (16-25)	15 (12-20)	12 (8.7-16)	9.4 (6.5-14)	7.6 (5.0-11)	6.4 (3.9-10)	5.8 (3.4-9.3)	5.2 (2.9-8.6)	4.8 (2.6-8.0)
3	45 (37-52)	35 (28-42)	27 (22-34)	21 (16-28)	16 (12-24)	13 (8.7-20)	11 (6.6-17)	9.0 (5.2-15)	8.0 (4.4-14)	7.3 (3.9-13)	6.7 (3.4-12)
4	54 (47-61)	44 (36-50)	35 (28-42)	28 (22-35)	22 (17-30)	18 (13-25)	15 (10-22)	12 (8.0-19)	11 (6.8-18)	10 (5.9-16)	9.2 (5.2-15)
5	63 (58-68)	54 (48-59)	44 (39-50)	36 (31-42)	29 (24-36)	23 (20-30)	19 (16-26)	16 (13-22)	15 (11-21)	13 (9.8-19)	12 (8.7-18)
6	70	62	53	44	37	30	25	21	19	18	16

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	19	14	11	8.5	6.6	5.3	4.3	3.6	3.2	2.9	2.6
1	27 (23-32)	20 (17-25)	16 (13-19)	12 (9.5-15)	9.4 (7.2-11)	7.4 (5.6-9.0)	6.0 (4.4-7.2)	5.0 (3.6-6.0)	4.4 (3.1-5.3)	3.9 (2.7-4.7)	3.6 (2.4-4.3)
2	36 (29-44)	28 (22-35)	22 (17-28)	17 (13-22)	13 (9.7-18)	10 (7.4-14)	8.3 (5.7-11)	6.9 (4.6-9.6)	6.0 (3.9-8.4)	5.3 (3.4-7.5)	4.8 (3.0-6.8)
3	46 (38-55)	38 (30-46)	30 (23-38)	23 (17-31)	18 (13-25)	14 (9.8-20)	11 (7.6-17)	9.5 (6.1-14)	8.2 (5.2-12)	7.2 (4.4-11)	6.4 (3.9-10)
4	56 (47-63)	48 (39-55)	39 (31-47)	31 (24-39)	25 (19-32)	20 (14-26)	16 (11-21)	13 (9.0-18)	11 (7.6-16)	9.6 (6.5-14)	8.5 (5.7-13)
5	65 (58-70)	57 (50-63)	49 (42-55)	41 (34-47)	33 (27-39)	26 (21-32)	21 (17-26)	17 (14-22)	15 (12-19)	13 (10-17)	11 (9.1-15)
6	72	66	59	51	42	35	28	23	20	17	15

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	19	15	12	9.6	7.7	6.2	5.1	4.4	3.8	3.4	3.1
1	28 (22-45)	23 (17-37)	18 (13-29)	14 (10-23)	11 (8.2-18)	9.1 (6.4-14)	7.3 (5.1-11)	6.2 (4.3-8.5)	5.3 (3.7-6.9)	4.6 (3.2-5.7)	4.1 (2.8-4.8)
2	39 (28-54)	32 (22-46)	26 (18-38)	21 (14-31)	17 (11-25)	13 (8.6-20)	11 (6.7-15)	8.8 (5.6-12)	7.4 (4.7-10)	6.4 (4.0-8.6)	5.5 (3.5-7.3)
3	49 (35-63)	43 (29-56)	36 (23-48)	29 (19-40)	24 (15-33)	19 (11-27)	15 (9.0-21)	12 (7.4-18)	10 (6.3-15)	8.8 (5.3-13)	7.5 (4.6-11)
4	60 (44-70)	53 (37-64)	46 (30-56)	39 (25-49)	33 (20-42)	27 (16-34)	21 (13-28)	18 (10-23)	15 (8.9-19)	12 (7.6-16)	10 (6.6-14)
5	69 (53-75)	63 (46-70)	57 (39-64)	50 (33-57)	43 (27-50)	36 (22-42)	29 (18-35)	24 (15-30)	20 (13-25)	17 (11-21)	14 (9.9-18)
6	77	72	67	60	53	46	39	33	27	23	19

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	19	15	12	10	8.3	6.8	5.6	4.9	4.3	3.8	3.3
1	27 (20-42)	22 (16-36)	18 (13-30)	15 (11-25)	12 (8.6-20)	10 (7.0-16)	8.2 (5.7-13)	7.0 (4.8-11)	6.0 (4.1-8.7)	5.2 (3.6-7.3)	4.6 (3.1-6.1)
2	36 (26-52)	31 (21-45)	26 (18-39)	21 (14-32)	18 (12-27)	14 (9.3-22)	12 (7.6-18)	10 (6.4-15)	8.5 (5.4-12)	7.3 (4.6-10)	6.3 (4.0-8.7)
3	46 (32-59)	40 (27-53)	34 (23-47)	29 (19-40)	24 (15-34)	20 (12-28)	17 (10-24)	14 (8.5-20)	12 (7.2-17)	10 (6.2-14)	8.7 (5.3-12)
4	56 (39-66)	50 (34-60)	44 (29-54)	38 (24-48)	33 (20-42)	28 (17-36)	23 (14-30)	20 (12-26)	17 (9.9-22)	14 (8.5-19)	12 (7.3-16)
5	65 (48-71)	60 (42-66)	54 (36-61)	48 (31-55)	42 (26-49)	36 (22-43)	31 (18-37)	27 (16-32)	23 (14-28)	19 (12-24)	16 (10-21)
6	73	69	64	58	52	46	40	35	30	26	22

Ten year probability of osteoporotic fractures (%) according to BMD, the number of clinical risk factors (CRF) and age in men 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	17	14	12	9.6	8.0	6.6	5.6	4.9	4.3	3.8	3.4
1	24 (18-39)	20 (15-33)	17 (12-28)	14 (10-24)	12 (8.3-20)	9.8 (6.8-16)	8.3 (5.7-14)	7.2 (4.9-11)	6.2 (4.3-9.7)	5.4 (3.7-8.2)	4.7 (3.2-7.0)
2	33 (23-48)	28 (19-42)	24 (16-37)	20 (13-31)	17 (11-26)	14 (9.2-22)	12 (7.7-19)	10 (6.6-16)	9.0 (5.7-14)	7.8 (4.9-12)	6.7 (4.2-9.9)
3	43 (29-56)	38 (25-50)	33 (21-45)	28 (18-39)	24 (15-34)	20 (12-29)	17 (10-25)	15 (8.9-21)	13 (7.7-18)	11 (6.6-16)	9.5 (5.7-13)
4	53 (36-63)	48 (31-58)	43 (27-53)	38 (23-47)	33 (20-42)	28 (16-36)	24 (14-32)	21 (12-28)	18 (10-24)	16 (9.0-21)	13 (7.8-18)
5	62 (44-68)	58 (39-64)	53 (34-60)	48 (30-54)	43 (26-49)	37 (22-44)	33 (19-39)	29 (16-34)	25 (14-30)	22 (12-26)	19 (11-23)
6	70	66	63	58	53	48	43	38	34	29	26

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	10	8.9	7.6	6.4	5.4	4.7	4.2	3.7	3.3	2.9
1	18 (13-29)	15 (11-25)	13 (9.3-22)	11 (7.8-19)	9.5 (6.6-16)	8.0 (5.5-13)	7.0 (4.8-12)	6.2 (4.2-10)	5.5 (3.7-8.8)	4.8 (3.3-7.6)	4.2 (2.9-6.6)
2	25 (17-38)	22 (15-33)	19 (12-29)	16 (10-25)	14 (8.9-22)	12 (7.5-18)	10 (6.5-16)	9.1 (5.7-14)	8.0 (5.0-12)	7.0 (4.4-11)	6.2 (3.8-9.3)
3	34 (22-46)	30 (19-42)	26 (17-37)	23 (14-33)	20 (12-29)	17 (10-25)	15 (8.8-22)	13 (7.7-19)	12 (6.8-17)	10 (5.9-15)	8.9 (5.2-13)
4	44 (28-54)	40 (25-50)	35 (22-45)	31 (19-40)	28 (16-36)	24 (14-32)	21 (12-28)	19 (11-25)	17 (9.3-22)	15 (8.2-19)	13 (7.2-17)
5	54 (36-60)	50 (32-56)	45 (28-52)	41 (24-48)	37 (21-43)	33 (18-38)	29 (16-35)	26 (14-31)	23 (13-28)	20 (11-25)	18 (9.8-22)
6	62	59	56	52	47	43	39	35	32	28	25