

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

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	18	11	7.7	5.5	4.3	3.5	2.9	2.6	2.5	2.4	2.3
1	27 (23-34)	18 (15-22)	12 (10-15)	8.4 (6.7-11)	6.5 (4.8-8.1)	5.2 (3.7-6.7)	4.4 (3.0-5.9)	3.9 (2.6-5.4)	3.7 (2.4-5.2)	3.6 (2.3-5.0)	3.4 (2.2-4.8)
2	39 (31-53)	26 (21-36)	18 (14-25)	13 (9.0-18)	9.6 (6.2-15)	7.7 (4.6-12)	6.5 (3.6-11)	5.8 (3.1-9.9)	5.5 (2.9-9.5)	5.2 (2.7-9.1)	5.0 (2.6-8.8)
3	54 (40-69)	37 (27-48)	26 (19-35)	18 (12-28)	14 (8.3-23)	11 (6.1-20)	9.4 (4.8-17)	8.5 (4.1-16)	8.0 (3.7-15)	7.6 (3.5-14)	7.3 (3.3-14)
4	69 (52-81)	50 (36-61)	36 (25-44)	26 (18-35)	20 (13-29)	16 (10-25)	13 (7.9-22)	12 (6.7-20)	11 (6.1-19)	11 (5.7-18)	10 (5.4-18)
5	82 (73-90)	65 (55-73)	49 (39-53)	36 (28-42)	28 (22-35)	22 (17-29)	19 (14-25)	17 (12-23)	16 (11-22)	15 (10-21)	14 (9.9-20)
6	92	79	63	48	38	31	26	23	22	21	20

Ten year probability of osteoporotic 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	19	13	8.9	6.6	5.1	4.1	3.4	3.1	2.9	2.7	2.6
1	28 (26-34)	19 (17-23)	13 (12-16)	9.9 (7.9-12)	7.6 (5.7-9.3)	6.1 (4.4-7.9)	5.1 (3.5-6.8)	4.6 (3.1-6.3)	4.3 (2.8-6.0)	4.1 (2.6-5.7)	3.8 (2.5-5.4)
2	40 (33-52)	28 (23-37)	20 (15-26)	15 (11-20)	11 (7.4-16)	9.0 (5.5-14)	7.5 (4.3-12)	6.8 (3.8-11)	6.3 (3.4-11)	5.9 (3.1-10)	5.6 (2.9-9.6)
3	54 (42-67)	39 (30-49)	28 (21-38)	21 (14-31)	16 (9.9-26)	13 (7.3-22)	11 (5.7-19)	9.8 (4.9-18)	9.1 (4.4-17)	8.5 (4.1-16)	8.1 (3.8-15)
4	69 (54-79)	52 (39-61)	39 (28-48)	29 (20-39)	23 (16-32)	18 (12-28)	15 (9.4-24)	14 (8.0-22)	13 (7.2-21)	12 (6.6-20)	11 (6.1-19)
5	82 (74-88)	66 (58-73)	52 (43-57)	40 (33-46)	31 (25-38)	25 (20-33)	21 (17-28)	19 (14-26)	18 (13-25)	17 (12-23)	16 (11-22)
6	91	80	65	52	42	34	29	26	24	23	21

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	21	15	11	7.9	6.2	5.0	4.2	3.8	3.5	3.2	3.0
1	30 (28-34)	21 (19-25)	16 (13-18)	12 (9.3-14)	9.1 (6.9-11)	7.3 (5.3-9.5)	6.2 (4.3-8.3)	5.6 (3.8-7.7)	5.2 (3.4-7.2)	4.8 (3.2-6.7)	4.5 (2.9-6.3)
2	42 (36-52)	30 (26-39)	22 (18-29)	17 (12-23)	13 (8.9-19)	11 (6.7-16)	9.1 (5.3-14)	8.2 (4.6-13)	7.5 (4.1-12)	7.0 (3.7-12)	6.5 (3.5-11)
3	55 (45-65)	42 (33-52)	31 (23-42)	24 (16-35)	19 (12-29)	15 (8.8-25)	13 (7.0-22)	12 (6.0-21)	11 (5.3-19)	9.9 (4.8-18)	9.3 (4.5-17)
4	69 (57-77)	55 (42-62)	42 (32-52)	33 (24-43)	26 (19-37)	21 (14-31)	18 (11-28)	16 (9.8-26)	15 (8.6-24)	14 (7.8-23)	13 (7.2-21)
5	81 (75-86)	68 (61-72)	55 (48-61)	44 (37-51)	35 (29-43)	29 (24-37)	25 (19-32)	22 (17-30)	20 (15-28)	19 (13-26)	18 (12-25)
6	89	80	68	56	46	38	33	30	27	25	24

Ten year probability of osteoporotic 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	24	17	13	9.5	7.4	5.9	5.2	4.6	4.2	3.8	3.5
1	33 (31-37)	24 (22-27)	18 (15-20)	14 (11-16)	11 (8.2-13)	8.6 (6.3-11)	7.5 (5.3-10)	6.7 (4.6-9.2)	6.1 (4.1-8.4)	5.6 (3.7-7.8)	5.1 (3.4-7.2)
2	45 (39-54)	34 (28-41)	26 (20-32)	20 (15-26)	15 (11-22)	12 (8.0-18)	11 (6.6-17)	9.6 (5.6-15)	8.7 (4.9-14)	8.0 (4.4-13)	7.4 (4.0-12)
3	58 (49-66)	45 (37-56)	35 (27-47)	27 (19-39)	22 (14-33)	17 (11-28)	15 (8.6-25)	14 (7.3-23)	12 (6.4-22)	11 (5.7-20)	10 (5.1-19)
4	70 (60-76)	57 (47-66)	46 (36-56)	37 (28-48)	29 (22-41)	24 (17-35)	21 (14-32)	19 (12-29)	17 (10-27)	16 (9.1-25)	14 (8.2-23)
5	80 (76-83)	70 (64-74)	58 (52-65)	47 (42-55)	39 (33-47)	32 (27-40)	28 (22-37)	25 (19-34)	23 (17-31)	21 (15-29)	19 (14-27)
6	87	80	70	59	49	41	37	33	30	28	26

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	28	21	16	12	9.3	7.6	6.6	5.8	5.1	4.6	4.2
1	39 (35-45)	29 (25-35)	22 (19-26)	17 (14-20)	13 (10-15)	11 (8.1-12)	9.1 (6.7-11)	8.0 (5.8-9.3)	7.1 (5.0-8.3)	6.3 (4.5-7.5)	5.7 (4.0-6.8)
2	52 (44-62)	41 (33-50)	31 (24-39)	24 (18-31)	18 (13-24)	15 (10-19)	13 (8.4-17)	11 (7.1-15)	9.6 (6.1-13)	8.6 (5.4-12)	7.7 (4.8-11)
3	66 (55-75)	53 (42-65)	42 (32-54)	33 (23-44)	25 (17-35)	20 (13-29)	17 (11-25)	15 (9.2-22)	13 (7.9-20)	12 (6.9-18)	10 (6.2-16)
4	77 (69-83)	67 (57-74)	55 (45-64)	44 (34-53)	34 (26-44)	28 (21-37)	23 (17-32)	20 (14-28)	17 (12-25)	15 (11-23)	14 (9.6-21)
5	85 (81-88)	78 (72-82)	68 (61-73)	56 (49-63)	46 (39-52)	37 (31-44)	31 (26-38)	26 (22-33)	23 (19-30)	20 (17-27)	18 (15-24)
6	89	85	79	69	58	48	41	35	30	26	23

Ten year probability of osteoporotic 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	33	25	20	15	12	9.9	8.5	7.4	6.5	5.7	5.1
1	46 (39-65)	37 (30-53)	29 (23-41)	22 (17-31)	17 (13-23)	14 (11-18)	12 (8.7-14)	10 (7.4-11)	8.6 (6.3-10)	7.5 (5.5-8.9)	6.7 (4.8-8.0)
2	60 (48-76)	50 (38-67)	40 (29-56)	31 (22-45)	24 (17-35)	20 (13-28)	16 (11-22)	14 (9.1-18)	12 (7.8-15)	10 (6.7-14)	8.7 (5.8-12)
3	72 (59-82)	63 (48-76)	53 (37-67)	43 (29-57)	34 (22-46)	28 (18-38)	23 (14-31)	19 (12-26)	16 (10-22)	13 (8.7-18)	11 (7.5-16)
4	80 (69-86)	74 (59-82)	66 (49-76)	56 (39-67)	46 (31-56)	38 (25-47)	31 (21-39)	25 (18-33)	21 (15-28)	18 (13-24)	15 (12-20)
5	86 (77-89)	82 (70-86)	77 (62-82)	69 (52-75)	59 (43-66)	50 (36-57)	42 (31-48)	34 (26-40)	28 (23-34)	24 (20-29)	20 (17-25)
6	89	87	84	79	72	63	54	46	38	31	26

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	36	28	22	18	14	12	10	8.7	7.5	6.5	5.7
1	48 (40-65)	39 (32-56)	32 (25-46)	25 (19-36)	20 (15-28)	17 (13-23)	14 (10-18)	12 (8.7-15)	10 (7.4-12)	8.7 (6.3-9.9)	7.5 (5.4-8.6)
2	59 (48-74)	51 (40-67)	43 (32-58)	35 (25-49)	28 (20-40)	23 (16-33)	19 (13-27)	16 (11-22)	14 (9.2-18)	12 (7.8-15)	9.9 (6.6-13)
3	69 (57-80)	62 (49-74)	54 (40-67)	46 (32-59)	38 (26-50)	32 (21-42)	27 (17-35)	22 (14-30)	18 (12-25)	16 (10-21)	13 (8.6-18)
4	77 (66-83)	72 (58-80)	65 (49-74)	57 (41-67)	49 (34-59)	42 (28-51)	36 (24-44)	30 (20-37)	25 (17-32)	21 (15-27)	17 (13-23)
5	82 (73-86)	79 (67-83)	74 (60-79)	68 (52-74)	61 (44-67)	54 (38-60)	46 (33-53)	39 (28-46)	33 (25-39)	28 (21-33)	23 (18-28)
6	86	84	81	76	71	65	58	50	43	36	30

Ten year probability of osteoporotic 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	33	27	22	17	15	12	10	9.0	7.7	6.6	5.7
1	44 (36-61)	37 (29-53)	30 (23-44)	24 (19-36)	20 (15-29)	17 (13-24)	15 (11-20)	12 (8.9-16)	10 (7.5-13)	8.9 (6.4-11)	7.6 (5.4-9.1)
2	55 (44-70)	48 (37-63)	40 (30-55)	34 (24-47)	28 (20-40)	24 (16-34)	20 (14-28)	17 (11-24)	14 (9.5-20)	12 (8.0-16)	10 (6.8-14)
3	65 (53-76)	59 (45-71)	51 (38-64)	44 (31-57)	38 (26-50)	32 (21-43)	28 (18-37)	23 (15-31)	20 (13-27)	16 (11-22)	14 (8.9-19)
4	73 (61-80)	68 (54-77)	62 (46-71)	55 (39-65)	49 (33-59)	43 (29-52)	37 (24-45)	31 (21-39)	26 (18-33)	22 (15-29)	19 (13-24)
5	79 (68-83)	76 (62-80)	71 (56-77)	65 (49-72)	60 (43-66)	54 (38-61)	47 (33-54)	41 (28-48)	35 (24-41)	30 (21-36)	25 (18-30)
6	82	81	78	74	70	64	58	52	45	39	33

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	26	21	17	14	12	11	9.0	7.7	6.6	5.6	4.8
1	35 (27-50)	29 (22-43)	24 (18-36)	20 (15-30)	17 (12-25)	15 (11-21)	13 (8.9-18)	11 (7.6-15)	9.1 (6.4-12)	7.7 (5.4-10)	6.6 (4.6-8.6)
2	45 (34-59)	39 (28-52)	33 (23-46)	28 (19-39)	24 (16-34)	20 (14-29)	17 (12-25)	15 (9.8-21)	13 (8.3-18)	11 (7.0-15)	9.1 (5.9-13)
3	55 (42-67)	49 (36-61)	43 (30-55)	37 (25-48)	32 (21-43)	28 (18-37)	24 (15-32)	21 (13-28)	17 (11-24)	15 (9.2-20)	13 (7.8-17)
4	64 (51-73)	59 (44-68)	53 (38-63)	47 (32-57)	42 (28-52)	37 (24-46)	32 (21-40)	28 (18-35)	24 (15-30)	20 (13-26)	17 (11-22)
5	72 (59-77)	68 (53-74)	63 (46-69)	58 (41-64)	53 (36-60)	47 (32-54)	42 (28-49)	37 (24-43)	32 (21-38)	28 (18-33)	24 (15-29)
6	77	75	72	68	63	58	53	48	42	37	32