

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 body mass index (BMI kg/m²), 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.

Age = 50 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.3	2.2	2.1	1.9	1.6	1.4	1.2
1	3.7 (2.5-5.6)	3.4 (2.3-5.0)	3.3 (2.2-4.6)	2.9 (1.9-4.0)	2.5 (1.7-3.5)	2.2 (1.5-3.0)	1.9 (1.3-2.6)
2	5.8 (3.2-9.8)	5.4 (2.9-9.2)	5.1 (2.7-8.9)	4.4 (2.3-7.8)	3.9 (2.0-6.8)	3.4 (1.8-5.9)	2.9 (1.5-5.2)
3	9.1 (4.6-15)	8.2 (4.1-14)	7.7 (3.7-14)	6.7 (3.2-12)	5.8 (2.8-11)	5.1 (2.4-9.3)	4.4 (2.1-8.1)
4	14 (7.6-22)	12 (6.6-20)	12 (6.1-19)	10 (5.2-16)	8.7 (4.5-14)	7.5 (3.8-13)	6.5 (3.3-11)
5	21 (13-27)	18 (12-24)	17 (11-23)	15 (9.7-20)	13 (8.5-17)	11 (7.4-15)	9.5 (6.4-13)
6	30	27	24	21	18	16	14

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.7	2.5	2.4	2.1	1.8	1.6	1.4
1	4.3 (2.9-6.4)	4.0 (2.7-5.6)	3.8 (2.6-5.2)	3.3 (2.2-4.5)	2.8 (1.9-3.9)	2.5 (1.6-3.3)	2.1 (1.4-2.9)
2	6.8 (3.9-11)	6.2 (3.4-10)	5.8 (3.1-9.8)	5.0 (2.7-8.5)	4.3 (2.3-7.4)	3.7 (2.0-6.5)	3.2 (1.7-5.6)
3	11 (5.8-17)	9.4 (4.9-16)	8.7 (4.4-15)	7.5 (3.8-13)	6.5 (3.2-12)	5.6 (2.8-10)	4.8 (2.4-8.7)
4	16 (9.5-24)	14 (8.1-22)	13 (7.2-21)	11 (6.1-18)	9.6 (5.2-16)	8.3 (4.4-14)	7.1 (3.8-12)
5	23 (15-30)	21 (14-27)	19 (13-25)	16 (11-22)	14 (9.5-19)	12 (8.2-16)	10 (7.0-14)
6	33	30	27	23	20	17	15

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	3.3	3.1	2.9	2.5	2.2	1.9	1.6
1	5.2 (3.6-7.5)	4.8 (3.3-6.6)	4.5 (3.1-6.1)	3.9 (2.7-5.3)	3.4 (2.3-4.5)	2.9 (1.9-3.9)	2.5 (1.7-3.3)
2	8.1 (4.9-12)	7.3 (4.3-12)	6.9 (3.9-11)	5.9 (3.3-9.8)	5.1 (2.8-8.5)	4.4 (2.4-7.4)	3.7 (2.0-6.4)
3	12 (7.5-19)	11 (6.3-18)	10 (5.5-17)	8.8 (4.7-15)	7.5 (4.0-13)	6.5 (3.4-11)	5.5 (2.9-9.7)
4	18 (12-26)	16 (10-24)	15 (8.9-23)	13 (7.5-20)	11 (6.3-18)	9.5 (5.3-15)	8.1 (4.4-13)
5	26 (17-33)	23 (16-30)	22 (15-28)	19 (13-25)	16 (11-21)	14 (9.5-18)	12 (8.1-16)
6	36	33	30	26	22	19	16

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.1	3.8	3.6	3.1	2.6	2.2	1.9
1	6.4 (4.5-8.8)	5.8 (4.1-7.8)	5.5 (3.8-7.2)	4.7 (3.2-6.2)	4.0 (2.7-5.2)	3.4 (2.3-4.5)	2.9 (2.0-3.8)
2	9.6 (6.2-14)	8.8 (5.4-13)	8.3 (4.9-13)	7.0 (4.1-11)	6.0 (3.4-9.7)	5.1 (2.9-8.4)	4.3 (2.4-7.2)
3	14 (9.3-20)	13 (8.2-20)	12 (7.1-19)	10 (5.9-17)	8.8 (4.9-14)	7.5 (4.1-12)	6.3 (3.5-11)
4	20 (14-28)	19 (13-27)	18 (11-26)	15 (9.3-23)	13 (7.7-20)	11 (6.4-17)	9.1 (5.3-14)
5	28 (20-36)	26 (19-34)	25 (18-32)	21 (15-28)	18 (13-24)	15 (11-21)	13 (9.3-18)
6	38	36	34	29	25	21	18

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.3	4.9	4.7	3.9	3.3	2.8	2.4
1	8.1 (5.8-10)	7.4 (5.3-9.5)	6.9 (5.0-8.9)	5.8 (4.1-7.5)	4.8 (3.4-6.3)	4.0 (2.9-5.3)	3.4 (2.4-4.5)
2	12 (8.0-18)	11 (7.2-16)	10 (6.5-15)	8.4 (5.3-12)	7.0 (4.4-10)	5.9 (3.7-8.6)	4.9 (3.0-7.3)
3	18 (11-27)	16 (10-24)	15 (9.6-22)	12 (7.9-18)	10 (6.5-15)	8.5 (5.4-13)	7.1 (4.4-11)
4	26 (17-35)	24 (16-33)	22 (15-31)	18 (12-26)	15 (9.7-22)	12 (7.9-18)	10 (6.5-15)
5	36 (30-44)	33 (27-42)	30 (25-38)	25 (20-33)	21 (17-28)	18 (14-23)	15 (11-19)
6	46	44	41	35	30	25	21

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.2	6.8	6.4	5.3	4.4	3.7	3.1
1	11 (7.7-18)	11 (7.2-15)	9.6 (6.8-12)	7.9 (5.6-10)	6.5 (4.6-8.1)	5.3 (3.7-6.6)	4.4 (3.1-5.5)
2	18 (10-28)	16 (9.9-25)	14 (9.0-21)	12 (7.3-17)	9.7 (6.0-14)	7.9 (4.9-12)	6.5 (4.0-9.4)
3	26 (14-40)	24 (14-36)	21 (13-31)	18 (11-26)	14 (8.5-21)	12 (6.9-17)	9.5 (5.6-14)
4	36 (22-49)	34 (21-46)	31 (19-42)	26 (16-36)	21 (13-30)	17 (10-25)	14 (8.4-21)
5	47 (34-57)	45 (32-55)	42 (31-52)	36 (26-45)	30 (21-39)	25 (18-32)	20 (14-27)
6	59	57	54	48	41	35	29

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.3	8.8	8.4	6.8	5.6	4.6	3.8
1	15 (9.9-23)	14 (9.4-20)	13 (8.9-18)	10 (7.2-14)	8.3 (5.8-11)	6.7 (4.7-9.1)	5.5 (3.8-7.2)
2	22 (13-34)	20 (13-31)	19 (12-27)	15 (9.6-22)	12 (7.7-18)	9.9 (6.2-14)	8.0 (5.0-11)
3	30 (18-44)	29 (17-41)	27 (17-37)	22 (13-31)	18 (11-26)	15 (8.5-21)	12 (6.8-17)
4	41 (26-53)	39 (25-51)	36 (24-47)	31 (20-41)	25 (16-34)	21 (13-29)	17 (10-24)
5	52 (37-60)	49 (35-58)	47 (34-56)	41 (29-50)	35 (24-43)	29 (20-37)	24 (16-31)
6	62	60	58	52	45	39	33

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	10	9.7	7.8	6.3	5.1	4.2
1	18 (12-28)	16 (11-25)	15 (10-21)	12 (8.3-17)	9.5 (6.6-14)	7.7 (5.3-11)	6.2 (4.2-8.6)
2	26 (17-40)	24 (15-36)	22 (14-32)	18 (11-26)	14 (9.0-21)	12 (7.1-17)	9.2 (5.7-14)
3	36 (23-51)	34 (21-47)	31 (19-43)	26 (16-37)	21 (12-31)	17 (9.9-25)	14 (7.8-20)
4	47 (32-60)	45 (30-57)	42 (28-53)	35 (23-46)	30 (19-40)	24 (15-33)	20 (12-28)
5	58 (44-65)	56 (41-64)	53 (39-62)	47 (33-56)	40 (27-49)	34 (23-42)	28 (18-36)
6	66	65	64	58	51	45	38

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	9.8	9.2	7.4	5.9	4.8	3.9
1	17 (12-27)	15 (11-24)	14 (9.8-21)	11 (7.8-17)	9.0 (6.2-13)	7.2 (4.9-10)	5.8 (3.9-8.2)
2	26 (17-39)	23 (15-35)	21 (13-31)	17 (11-25)	14 (8.5-20)	11 (6.7-16)	8.7 (5.3-13)
3	36 (23-50)	33 (20-46)	30 (18-42)	25 (15-35)	20 (12-29)	16 (9.3-24)	13 (7.4-20)
4	47 (31-59)	44 (29-56)	41 (27-52)	34 (22-45)	29 (18-38)	23 (14-32)	19 (12-27)
5	57 (43-64)	55 (40-63)	52 (38-61)	46 (32-55)	39 (26-48)	33 (22-41)	27 (17-35)
6	63	64	63	57	51	44	37