

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 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	3.3	2.9	2.8	2.4	2.1	1.8	1.6
1	5.5 (3.8-8.2)	4.7 (3.2-6.8)	4.3 (2.9-6.0)	3.8 (2.6-5.2)	3.3 (2.2-4.5)	2.9 (1.9-4.0)	2.5 (1.7-3.4)
2	8.9 (4.9-15)	7.5 (4.0-12)	6.7 (3.6-11)	5.9 (3.1-10)	5.1 (2.7-8.8)	4.4 (2.3-7.7)	3.9 (2.0-6.7)
3	14 (7.3-24)	12 (5.8-20)	10 (5.0-18)	8.9 (4.3-16)	7.8 (3.7-14)	6.8 (3.2-12)	5.9 (2.8-11)
4	22 (12-33)	18 (10-28)	15 (8.5-25)	13 (7.3-22)	12 (6.3-19)	10 (5.4-17)	8.8 (4.7-15)
5	33 (21-41)	27 (17-34)	23 (15-30)	20 (13-26)	17 (12-23)	15 (10-20)	13 (8.8-18)
6	48	39	33	29	25	22	19

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	4.4	3.8	3.5	3.0	2.6	2.3	2.0
1	7.3 (5.2-11)	6.1 (4.3-8.6)	5.5 (3.8-7.5)	4.8 (3.3-6.5)	4.1 (2.8-5.6)	3.6 (2.5-4.9)	3.1 (2.1-4.2)
2	12 (6.9-19)	9.6 (5.5-15)	8.5 (4.7-14)	7.3 (4.0-12)	6.4 (3.5-11)	5.5 (3.0-9.3)	4.8 (2.6-8.1)
3	19 (10-29)	15 (8.0-25)	13 (6.6-22)	11 (5.6-19)	9.7 (4.8-17)	8.4 (4.2-15)	7.3 (3.6-13)
4	28 (17-41)	23 (14-34)	19 (11-30)	17 (9.6-26)	14 (8.2-23)	13 (7.0-20)	11 (6.0-18)
5	42 (28-50)	33 (23-41)	28 (20-36)	24 (17-31)	21 (15-28)	18 (13-24)	16 (11-21)
6	58	47	40	35	30	27	23

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	6.3	5.3	4.7	4.1	3.5	3.1	2.7
1	10 (7.4-14)	8.3 (6.0-11)	7.3 (5.2-9.8)	6.3 (4.4-8.4)	5.5 (3.8-7.3)	4.8 (3.3-6.3)	4.1 (2.8-5.5)
2	16 (9.9-24)	13 (7.7-19)	11 (6.4-18)	9.7 (5.5-16)	8.4 (4.7-14)	7.3 (4.1-12)	6.3 (3.5-10)
3	25 (15-36)	20 (11-31)	17 (9.2-28)	15 (7.8-25)	13 (6.7-22)	11 (5.7-19)	9.5 (4.9-17)
4	36 (23-49)	29 (19-42)	25 (16-37)	21 (13-33)	19 (11-29)	16 (9.6-25)	14 (8.2-22)
5	51 (38-60)	42 (30-51)	35 (26-44)	31 (23-39)	27 (20-34)	23 (17-30)	20 (15-27)
6	67	57	49	43	38	33	29

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	8.9	7.3	6.4	5.5	4.8	4.1	3.6
1	14 (11-18)	11 (8.4-15)	9.9 (7.1-13)	8.5 (6.1-11)	7.3 (5.2-9.4)	6.3 (4.4-8.1)	5.4 (3.8-7.0)
2	21 (14-30)	17 (11-25)	15 (9.0-22)	13 (7.6-20)	11 (6.5-17)	9.5 (5.5-15)	8.2 (4.7-13)
3	32 (22-43)	26 (16-38)	22 (13-34)	19 (11-30)	16 (9.3-27)	14 (7.9-23)	12 (6.7-20)
4	45 (31-57)	37 (25-50)	31 (22-45)	27 (18-40)	24 (16-35)	21 (13-31)	18 (11-27)
5	59 (48-68)	51 (40-60)	44 (34-53)	38 (30-47)	33 (26-42)	29 (22-37)	25 (19-33)
6	73	66	58	52	46	40	35

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	11	9.2	7.9	6.8	5.8	5.0
1	20 (15-24)	16 (12-20)	14 (10-17)	12 (8.7-15)	10 (7.4-13)	8.5 (6.3-11)	7.3 (5.3-9.4)
2	30 (21-40)	24 (16-32)	20 (13-27)	17 (11-23)	15 (9.4-20)	12 (7.9-17)	11 (6.7-15)
3	43 (31-56)	35 (24-48)	29 (19-42)	25 (16-36)	21 (14-31)	18 (11-27)	15 (9.6-23)
4	58 (46-70)	49 (38-63)	41 (31-55)	36 (26-49)	31 (22-43)	26 (19-37)	22 (16-32)
5	71 (65-78)	64 (58-73)	56 (49-65)	49 (42-58)	43 (36-52)	37 (30-45)	32 (26-39)
6	80	77	71	64	57	51	44

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	19	16	14	12	9.9	8.4	7.2
1	29 (22-40)	24 (18-32)	20 (15-24)	17 (13-20)	14 (11-17)	12 (9.1-15)	10 (7.7-13)
2	42 (29-57)	36 (24-48)	30 (20-39)	25 (17-33)	21 (14-28)	18 (12-24)	15 (9.7-20)
3	55 (40-71)	50 (35-64)	42 (28-57)	36 (24-49)	31 (20-43)	26 (17-37)	22 (14-31)
4	68 (53-78)	64 (48-76)	57 (42-71)	50 (36-64)	43 (31-57)	37 (26-50)	32 (22-43)
5	77 (67-82)	75 (64-82)	71 (60-79)	65 (54-74)	58 (47-67)	51 (41-60)	44 (35-53)
6	83	83	81	77	72	65	59

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	24	21	19	16	13	11	9.4
1	35 (26-48)	31 (23-42)	27 (21-34)	23 (17-29)	19 (14-24)	16 (12-20)	14 (9.9-16)
2	46 (34-62)	43 (31-56)	38 (27-49)	32 (22-42)	27 (19-35)	23 (15-30)	19 (13-25)
3	58 (43-71)	55 (41-68)	51 (38-63)	44 (32-56)	38 (27-49)	32 (22-42)	27 (19-36)
4	68 (54-77)	66 (53-76)	63 (50-74)	57 (44-68)	50 (38-62)	44 (32-56)	38 (27-49)
5	76 (66-81)	75 (64-81)	74 (63-80)	68 (57-76)	62 (51-71)	56 (45-65)	49 (39-58)
6	81	81	81	77	72	67	61

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	25	23	21	18	15	13	11
1	36 (28-50)	33 (25-45)	30 (23-39)	26 (19-33)	21 (16-27)	18 (13-23)	15 (11-19)
2	48 (36-63)	45 (33-59)	41 (29-53)	35 (25-46)	30 (20-39)	25 (17-34)	21 (14-28)
3	59 (45-72)	57 (42-70)	54 (39-66)	47 (33-60)	41 (28-53)	35 (23-46)	29 (19-40)
4	68 (56-78)	67 (54-77)	65 (52-75)	59 (45-70)	52 (39-64)	46 (33-57)	40 (28-51)
5	75 (66-79)	75 (65-80)	74 (64-80)	69 (58-76)	64 (52-72)	57 (45-66)	51 (39-60)
6	77	80	81	77	73	68	62

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	22	20	20	16	14	11	9.4
1	31 (23-45)	29 (21-40)	28 (20-36)	23 (17-30)	19 (14-25)	16 (11-21)	13 (9.4-17)
2	43 (31-58)	40 (28-54)	38 (26-49)	32 (22-42)	27 (18-36)	22 (15-30)	19 (12-25)
3	54 (39-67)	51 (37-65)	49 (35-62)	42 (29-55)	36 (24-49)	31 (20-42)	26 (16-36)
4	63 (50-73)	62 (48-72)	60 (47-70)	54 (40-65)	47 (34-59)	41 (29-52)	35 (24-46)
5	69 (61-74)	70 (60-76)	70 (59-76)	64 (52-72)	58 (46-67)	52 (40-61)	46 (34-55)
6	70	75	77	73	68	63	57