

Canada - 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 Canada. 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	3.1	3.0	2.6	2.3	2.0	1.8
1	5.3 (3.6-7.7)	4.9 (3.3-6.8)	4.7 (3.2-6.4)	4.1 (2.8-5.6)	3.6 (2.4-4.9)	3.2 (2.1-4.3)	2.8 (1.9-3.7)
2	8.4 (4.6-14)	7.6 (4.1-13)	7.2 (3.8-12)	6.3 (3.3-11)	5.5 (2.9-9.6)	4.8 (2.5-8.4)	4.2 (2.2-7.4)
3	13 (6.5-22)	12 (5.6-21)	11 (5.2-20)	9.4 (4.5-17)	8.3 (3.9-15)	7.3 (3.4-13)	6.4 (3.0-12)
4	20 (11-30)	17 (9.5-27)	16 (8.5-26)	14 (7.4-23)	12 (6.5-20)	11 (5.6-18)	9.4 (4.9-16)
5	29 (19-37)	25 (17-33)	23 (16-30)	20 (14-27)	18 (12-24)	16 (11-21)	14 (9.5-19)
6	42	36	32	29	25	22	20

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.1	4.7	4.5	4.0	3.5	3.0	2.7
1	8.0 (5.6-11)	7.3 (5.1-9.9)	7.0 (4.8-9.3)	6.1 (4.2-8.1)	5.3 (3.6-7.1)	4.7 (3.2-6.2)	4.1 (2.8-5.4)
2	12 (7.1-20)	11 (6.2-18)	11 (5.7-18)	9.2 (5.0-16)	8.1 (4.4-14)	7.1 (3.8-12)	6.2 (3.3-11)
3	19 (10-31)	17 (8.7-29)	16 (7.8-27)	14 (6.8-24)	12 (5.9-21)	11 (5.2-19)	9.3 (4.5-17)
4	28 (17-41)	25 (14-37)	23 (13-35)	20 (11-31)	18 (9.7-28)	15 (8.4-25)	14 (7.4-22)
5	40 (28-50)	35 (25-44)	32 (23-41)	28 (21-37)	25 (18-33)	22 (16-29)	19 (14-26)
6	55	48	44	39	35	31	27

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	7.4	6.7	6.3	5.5	4.8	4.2	3.7
1	12 (8.3-16)	10 (7.3-14)	9.7 (6.7-13)	8.5 (5.8-11)	7.4 (5.1-9.6)	6.5 (4.4-8.4)	5.7 (3.9-7.4)
2	18 (11-26)	16 (9.0-24)	14 (8.2-23)	13 (7.1-21)	11 (6.2-18)	9.7 (5.4-16)	8.5 (4.7-14)
3	26 (15-40)	23 (13-37)	21 (11-35)	19 (9.7-32)	16 (8.4-28)	14 (7.3-25)	13 (6.4-22)
4	38 (25-53)	33 (21-48)	30 (18-45)	27 (16-40)	23 (14-36)	21 (12-32)	18 (10-29)
5	52 (39-62)	45 (34-56)	41 (32-52)	37 (28-47)	33 (25-42)	29 (22-38)	26 (19-34)
6	67	60	55	50	45	40	35

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	9.9	8.7	8.0	7.0	6.1	5.3	4.6
1	15 (11-20)	13 (9.6-17)	12 (8.6-15)	11 (7.5-13)	9.2 (6.5-12)	8.0 (5.6-10)	7.0 (4.9-9.0)
2	23 (15-32)	20 (12-29)	18 (11-28)	16 (9.1-25)	14 (7.9-22)	12 (6.8-19)	10 (5.9-17)
3	33 (22-48)	29 (17-44)	26 (15-41)	23 (13-37)	20 (11-33)	17 (9.4-29)	15 (8.1-26)
4	46 (33-61)	40 (28-56)	36 (24-52)	32 (21-47)	28 (18-42)	25 (15-38)	22 (13-34)
5	61 (50-70)	54 (43-64)	49 (39-60)	44 (35-54)	39 (30-49)	35 (27-44)	31 (23-39)
6	75	69	63	57	52	46	41

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	13	11	10	8.8	7.6	6.6	5.7
1	20 (16-25)	17 (13-21)	15 (11-19)	13 (9.5-16)	11 (8.2-14)	9.5 (7.0-12)	8.2 (6.1-11)
2	30 (21-40)	25 (17-33)	21 (14-29)	18 (12-26)	16 (10-22)	14 (8.7-19)	12 (7.5-17)
3	44 (31-58)	36 (24-50)	30 (20-44)	26 (17-38)	23 (14-34)	20 (12-29)	17 (10-26)
4	59 (47-72)	50 (38-64)	42 (32-57)	37 (27-50)	32 (23-45)	28 (20-39)	24 (17-34)
5	73 (67-80)	65 (58-74)	57 (49-66)	50 (42-60)	44 (37-53)	39 (32-47)	33 (27-42)
6	83	79	72	65	59	52	46

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	19	16	14	12	10	8.6	7.4
1	29 (22-39)	24 (18-30)	20 (15-24)	17 (13-20)	15 (11-18)	12 (9.3-15)	11 (7.9-13)
2	42 (29-57)	35 (23-46)	29 (19-37)	25 (16-32)	21 (14-27)	18 (12-23)	15 (10-20)
3	57 (42-72)	49 (34-64)	41 (28-55)	35 (23-48)	30 (20-42)	26 (17-36)	22 (14-31)
4	70 (56-81)	65 (49-77)	56 (42-70)	49 (36-63)	43 (31-56)	37 (26-49)	31 (22-43)
5	80 (71-85)	77 (67-84)	71 (61-79)	65 (54-74)	58 (48-67)	51 (42-60)	44 (36-53)
6	86	85	83	78	73	66	59

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	25	21	19	16	14	12	10
1	36 (27-49)	31 (24-40)	27 (21-32)	23 (18-27)	20 (15-23)	17 (13-20)	14 (11-17)
2	48 (36-63)	43 (31-55)	38 (27-48)	33 (22-41)	28 (19-35)	24 (16-30)	20 (13-25)
3	61 (46-73)	56 (43-69)	51 (37-63)	44 (32-56)	38 (27-49)	33 (23-43)	28 (19-37)
4	71 (58-80)	68 (56-78)	64 (52-75)	58 (45-70)	51 (39-63)	44 (33-57)	38 (28-50)
5	78 (69-83)	77 (68-83)	75 (66-82)	70 (60-78)	64 (53-72)	57 (47-66)	51 (41-59)
6	83	83	83	79	75	69	63

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	28	26	25	21	18	15	13
1	39 (30-52)	36 (28-47)	34 (26-41)	29 (22-35)	25 (19-29)	21 (16-25)	18 (13-21)
2	51 (38-65)	48 (36-61)	45 (33-56)	39 (28-49)	34 (24-43)	29 (20-37)	25 (17-32)
3	62 (47-74)	60 (45-72)	57 (44-69)	51 (38-63)	45 (32-56)	39 (27-49)	33 (23-43)
4	71 (59-80)	70 (58-79)	68 (56-77)	62 (50-73)	56 (43-67)	50 (37-61)	43 (32-55)
5	77 (69-82)	77 (68-82)	77 (68-82)	72 (63-79)	67 (57-74)	61 (51-69)	55 (45-63)
6	80	82	83	79	76	71	65

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	27	26	25	22	18	16	13
1	37 (28-50)	35 (27-46)	34 (26-41)	29 (22-35)	25 (19-30)	21 (16-25)	18 (13-22)
2	49 (37-63)	46 (34-60)	45 (33-56)	39 (28-49)	34 (23-43)	29 (20-37)	24 (16-32)
3	60 (45-72)	58 (43-70)	56 (42-68)	50 (36-62)	44 (31-56)	38 (26-49)	32 (22-43)
4	68 (56-77)	68 (55-77)	66 (54-76)	61 (48-71)	54 (42-65)	48 (36-59)	42 (30-53)
5	74 (66-77)	75 (66-80)	75 (66-80)	70 (61-77)	65 (55-73)	59 (49-67)	53 (43-62)
6	75	79	80	77	73	69	63