

Canada - The probabilities of a hip fracture in women

The following tables give the 10-year probability (%) of a hip 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 Canada. 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	8.5	4.4	2.3	1.2	0.6	0.3	0.2	0.1	0.0	0.0	0.0
1	13 (9.0-17)	7.1 (4.7-9.3)	3.7 (2.4-4.8)	1.9 (1.2-2.5)	1.0 (0.6-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	21 (12-30)	11 (6.6-17)	5.9 (3.4-8.9)	3.0 (1.7-4.6)	1.6 (0.9-2.4)	0.8 (0.5-1.2)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
3	31 (18-46)	17 (9.9-27)	9.2 (5.1-15)	4.8 (2.7-7.9)	2.5 (1.4-4.1)	1.3 (0.7-2.1)	0.6 (0.4-1.1)	0.3 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.0 (0.0-0.1)
4	43 (30-61)	26 (16-38)	14 (8.8-22)	7.5 (4.6-12)	3.9 (2.4-6.2)	2.0 (1.2-3.2)	1.0 (0.6-1.6)	0.5 (0.3-0.9)	0.3 (0.2-0.5)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
5	59 (48-73)	37 (29-49)	21 (16-29)	11 (8.4-16)	6.0 (4.4-8.7)	3.1 (2.3-4.5)	1.6 (1.2-2.3)	0.8 (0.6-1.2)	0.4 (0.3-0.6)	0.2 (0.2-0.3)	0.1 (0.1-0.2)
6	75	51	31	17	9.1	4.8	2.4	1.3	0.7	0.4	0.2

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

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	9.2	5.0	2.7	1.5	0.8	0.4	0.2	0.1	0.1	0.0	0.0
1	14 (9.6-17)	7.9 (5.3-9.7)	4.3 (2.9-5.3)	2.3 (1.5-2.9)	1.3 (0.8-1.6)	0.7 (0.5-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)
2	21 (13-30)	12 (7.4-17)	6.7 (4.1-9.7)	3.7 (2.2-5.3)	2.0 (1.2-2.9)	1.1 (0.6-1.6)	0.6 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
3	31 (20-46)	18 (11-28)	10 (6.1-16)	5.7 (3.3-9.1)	3.1 (1.8-5.0)	1.7 (1.0-2.7)	0.9 (0.5-1.5)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)
4	44 (32-60)	27 (18-39)	16 (10-24)	8.8 (5.7-13)	4.8 (3.1-7.5)	2.6 (1.7-4.1)	1.4 (0.9-2.2)	0.8 (0.5-1.2)	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
5	59 (50-72)	38 (32-51)	23 (18-32)	13 (10-19)	7.3 (5.7-10)	4.0 (3.1-5.8)	2.2 (1.7-3.1)	1.2 (0.9-1.8)	0.7 (0.5-1.0)	0.4 (0.3-0.5)	0.2 (0.2-0.3)
6	74	52	33	19	11	6.0	3.3	1.8	1.0	0.6	0.3

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	11	6.0	3.4	1.9	1.1	0.6	0.3	0.2	0.1	0.1	0.0
1	16 (11-19)	9.3 (6.3-11)	5.3 (3.6-6.3)	3.0 (2.0-3.5)	1.7 (1.1-2.0)	0.9 (0.6-1.1)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.1 (0.0-0.1)
2	24 (15-31)	14 (8.9-19)	8.1 (5.0-11)	4.6 (2.8-6.3)	2.6 (1.6-3.6)	1.4 (0.9-2.0)	0.8 (0.5-1.1)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
3	34 (22-47)	21 (13-30)	12 (7.6-18)	7.0 (4.3-11)	4.0 (2.4-6.1)	2.2 (1.4-3.4)	1.3 (0.8-2.0)	0.7 (0.4-1.1)	0.4 (0.3-0.7)	0.2 (0.2-0.4)	0.1 (0.1-0.2)
4	46 (35-61)	30 (22-42)	18 (13-26)	11 (7.3-16)	6.0 (4.1-9.1)	3.4 (2.3-5.2)	1.9 (1.3-3.0)	1.1 (0.8-1.7)	0.7 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.3)
5	60 (54-73)	41 (36-53)	26 (22-35)	16 (13-22)	9.0 (7.4-13)	5.1 (4.2-7.3)	2.9 (2.4-4.2)	1.7 (1.4-2.5)	1.0 (0.8-1.4)	0.6 (0.5-0.8)	0.3 (0.3-0.5)
6	75	55	37	23	13	7.7	4.4	2.6	1.5	0.9	0.5

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

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	12	7.3	4.3	2.5	1.5	0.8	0.5	0.3	0.2	0.1	0.1
1	18 (13-21)	11 (7.6-13)	6.5 (4.5-7.8)	3.8 (2.6-4.6)	2.2 (1.5-2.7)	1.3 (0.9-1.6)	0.8 (0.5-0.9)	0.5 (0.3-0.6)	0.3 (0.2-0.3)	0.2 (0.1-0.2)	0.1 (0.1-0.1)
2	26 (18-33)	16 (11-21)	9.7 (6.3-13)	5.8 (3.7-7.6)	3.4 (2.2-4.5)	2.0 (1.3-2.6)	1.2 (0.8-1.6)	0.7 (0.5-1.0)	0.4 (0.3-0.6)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
3	36 (26-48)	23 (16-32)	14 (9.5-20)	8.6 (5.6-12)	5.1 (3.3-7.5)	3.0 (1.9-4.4)	1.8 (1.2-2.7)	1.1 (0.7-1.6)	0.7 (0.4-1.0)	0.4 (0.3-0.6)	0.2 (0.2-0.4)
4	49 (39-62)	33 (25-45)	21 (15-29)	13 (9.2-18)	7.6 (5.5-11)	4.5 (3.2-6.6)	2.7 (1.9-4.0)	1.6 (1.2-2.5)	1.0 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.3-0.5)
5	62 (56-74)	44 (38-56)	29 (25-39)	18 (15-25)	11 (9.1-15)	6.7 (5.4-9.3)	4.1 (3.3-5.7)	2.5 (2.0-3.5)	1.5 (1.2-2.1)	0.9 (0.7-1.3)	0.5 (0.4-0.8)
6	75	58	40	26	16	9.7	6.0	3.6	2.2	1.3	0.8

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	15	9.1	5.6	3.4	2.1	1.3	0.8	0.5	0.3	0.2	0.1
1	23 (20-28)	15 (13-18)	9.3 (7.9-12)	5.7 (4.8-7.2)	3.5 (2.9-4.4)	2.2 (1.8-2.7)	1.4 (1.1-1.7)	0.9 (0.7-1.1)	0.5 (0.5-0.7)	0.3 (0.3-0.4)	0.2 (0.2-0.3)
2	35 (29-45)	23 (19-31)	15 (12-20)	9.4 (7.3-13)	5.8 (4.5-7.9)	3.6 (2.8-4.9)	2.3 (1.7-3.1)	1.4 (1.1-2.0)	0.9 (0.7-1.2)	0.6 (0.4-0.8)	0.4 (0.3-0.5)
3	51 (41-60)	36 (27-45)	24 (18-31)	15 (11-20)	9.5 (6.8-13)	6.0 (4.2-8.1)	3.8 (2.7-5.2)	2.4 (1.7-3.3)	1.5 (1.1-2.1)	1.0 (0.7-1.3)	0.6 (0.4-0.8)
4	67 (57-74)	51 (41-59)	36 (27-43)	24 (18-29)	15 (11-19)	9.8 (7.0-12)	6.3 (4.5-7.9)	4.0 (2.8-5.1)	2.5 (1.8-3.2)	1.6 (1.1-2.0)	1.0 (0.7-1.3)
5	80 (74-83)	67 (59-72)	51 (43-56)	36 (30-41)	24 (19-27)	16 (12-18)	10 (8.0-12)	6.6 (5.1-7.6)	4.2 (3.3-4.9)	2.6 (2.1-3.1)	1.7 (1.3-2.0)
6	88	80	67	51	36	25	16	11	6.8	4.4	2.8

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

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	17	11	7.4	4.8	3.0	2.0	1.3	0.9	0.6	0.4	0.2
1	30 (24-55)	21 (16-40)	14 (10-28)	9.3 (6.7-19)	6.0 (4.3-13)	4.0 (2.8-8.4)	2.6 (1.9-5.6)	1.7 (1.2-3.7)	1.1 (0.8-2.5)	0.8 (0.5-1.6)	0.5 (0.3-1.1)
2	47 (32-71)	35 (22-58)	25 (14-44)	17 (9.4-31)	11 (6.1-21)	7.5 (4.0-15)	5.0 (2.7-9.9)	3.3 (1.8-6.6)	2.2 (1.2-4.4)	1.5 (0.8-2.9)	1.0 (0.5-1.9)
3	64 (44-81)	51 (31-71)	39 (21-58)	28 (14-44)	19 (9.1-32)	13 (6.1-22)	9.0 (4.0-16)	6.1 (2.7-11)	4.0 (1.8-7.1)	2.7 (1.2-4.8)	1.8 (0.8-3.2)
4	77 (58-86)	68 (44-79)	56 (32-70)	43 (22-57)	31 (15-43)	22 (9.8-32)	16 (6.6-23)	11 (4.4-16)	7.2 (2.9-11)	4.8 (1.9-7.2)	3.2 (1.3-4.8)
5	86 (72-89)	80 (61-85)	72 (47-78)	60 (34-67)	47 (24-54)	35 (17-41)	26 (11-30)	18 (7.7-21)	12 (5.1-15)	8.3 (3.4-10)	5.6 (2.3-6.8)
6	90	88	84	76	65	52	40	29	20	14	9.5

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	20	14	9.3	6.3	4.3	3.0	2.1	1.4	1.0	0.7	0.5
1	32 (25-57)	24 (17-45)	17 (12-34)	12 (8.2-24)	8.2 (5.6-17)	5.8 (3.9-12)	4.0 (2.7-8.6)	2.8 (1.9-6.0)	1.9 (1.3-4.2)	1.3 (0.9-2.9)	0.9 (0.6-2.0)
2	48 (33-70)	37 (24-60)	28 (17-48)	20 (11-37)	15 (7.8-27)	10 (5.5-20)	7.4 (3.8-15)	5.2 (2.6-10)	3.6 (1.8-7.3)	2.5 (1.3-5.1)	1.7 (0.9-3.6)
3	62 (44-79)	52 (33-71)	42 (24-61)	32 (17-49)	24 (12-38)	18 (8.2-29)	13 (5.8-22)	9.1 (4.0-16)	6.5 (2.8-11)	4.5 (1.9-8.0)	3.1 (1.3-5.6)
4	74 (57-84)	67 (45-78)	57 (34-70)	47 (25-60)	37 (18-50)	28 (13-40)	21 (9.1-30)	15 (6.4-23)	11 (4.5-17)	7.8 (3.1-12)	5.5 (2.2-8.4)
5	82 (68-86)	78 (59-82)	71 (48-77)	62 (37-69)	52 (28-60)	42 (21-50)	33 (15-39)	25 (11-30)	18 (7.6-23)	13 (5.3-16)	9.2 (3.7-12)
6	87	85	81	75	67	58	47	37	28	21	15

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

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	19	14	10	7.1	5.2	3.8	2.8	2.0	1.5	1.1	0.8
1	31 (24-55)	24 (18-45)	18 (13-35)	13 (9.3-27)	9.8 (6.8-20)	7.3 (5.0-15)	5.4 (3.7-12)	4.0 (2.7-8.6)	2.9 (2.0-6.3)	2.1 (1.4-4.6)	1.5 (1.0-3.4)
2	45 (32-66)	36 (24-58)	29 (18-48)	22 (13-39)	17 (9.5-31)	13 (7.0-24)	9.7 (5.2-19)	7.2 (3.8-14)	5.3 (2.8-11)	3.9 (2.0-7.8)	2.9 (1.5-5.8)
3	58 (41-75)	50 (33-68)	42 (25-60)	34 (19-50)	27 (14-42)	21 (10-34)	16 (7.8-26)	12 (5.7-20)	9.3 (4.2-15)	6.9 (3.1-12)	5.1 (2.2-8.7)
4	70 (52-80)	63 (43-75)	56 (34-68)	47 (26-60)	40 (20-52)	32 (16-43)	26 (12-36)	20 (8.7-28)	15 (6.5-22)	12 (4.8-17)	8.6 (3.5-13)
5	79 (63-83)	74 (55-79)	68 (46-74)	61 (37-68)	54 (30-61)	46 (24-53)	38 (18-45)	31 (14-37)	24 (10-29)	19 (7.8-23)	14 (5.8-18)
6	84	82	78	73	67	60	52	44	36	29	22

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	15	11	8.4	6.4	4.9	3.8	3.0	2.3	1.7	1.3	1.0
1	24 (19-46)	19 (14-38)	15 (11-30)	12 (8.3-24)	9.2 (6.4-19)	7.2 (5.0-15)	5.6 (3.9-12)	4.4 (3.0-9.5)	3.4 (2.3-7.4)	2.6 (1.8-5.7)	2.0 (1.4-4.4)
2	37 (25-57)	30 (19-50)	24 (15-42)	19 (11-35)	16 (9.0-29)	13 (7.0-23)	10 (5.5-19)	7.8 (4.2-15)	6.1 (3.2-12)	4.8 (2.5-9.3)	3.7 (1.9-7.3)
3	50 (33-67)	43 (26-61)	36 (21-53)	30 (16-46)	25 (13-39)	20 (10-33)	17 (8.0-27)	13 (6.3-22)	10 (4.9-17)	8.2 (3.8-14)	6.4 (2.9-11)
4	63 (43-74)	56 (36-69)	50 (29-62)	43 (23-55)	37 (19-48)	31 (15-42)	26 (12-35)	21 (9.4-29)	17 (7.3-24)	14 (5.7-19)	11 (4.4-16)
5	73 (54-78)	68 (47-74)	63 (39-69)	56 (33-63)	50 (27-57)	44 (22-51)	38 (18-44)	32 (14-38)	26 (12-32)	21 (9.1-26)	17 (7.1-21)
6	79	77	73	69	64	58	52	45	38	32	26