New Zealand - 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 New Zealand. 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	7.2	3.7	1.9	1.0	0.5	0.3	0.1	0.1	0.0	0.0	0.0
1	11 (7.6-15)	6.0 (3.9-7.8)	3.1 (2.0-4.1)	1.6 (1.0-2.1)	0.8 (0.5-1.1)	0.4 (0.3-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.1 (0.0-0.1)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
2	18 (11-26)	9.5 (5.6-14)	5.0 (2.9-7.5)	2.6 (1.5-3.9)	1.3 (0.8-2.0)	0.7 (0.4-1.0)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
3	26 (16-40)	15 (8.4-23)	7.8 (4.3-13)	4.0 (2.2-6.7)	2.1 (1.1-3.5)	1.1 (0.6-1.8)	0.5 (0.3-0.9)	0.3 (0.2-0.5)	0.1 (0.1-0.3)	0.1 (0.0-0.1)	0.0 (0.0-0.1)
4	38 (26-54)	22 (14-33)	12 (7.4-19)	6.3 (3.9-10)	3.3 (2.0-5.2)	1.7 (1.0-2.7)	0.9 (0.5-1.4)	0.4 (0.3-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
5	52 (42-67)	32 (25-44)	18 (13-25)	9.7 (7.1-14)	5.1 (3.7-7.3)	2.6 (1.9-3.8)	1.3 (1.0-2.0)	0.7 (0.5-1.0)	0.4 (0.3-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
6	69	45	27	15	7.7	4.0	2.1	1.1	0.6	0.3	0.2

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

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	7.5	4.1	2.2	1.2	0.6	0.3	0.2	0.1	0.1	0.0	0.0
1	12 (7.9-14)	6.5 (4.3-7.9)	3.5 (2.3-4.3)	1.9 (1.3-2.4)	1.0 (0.7-1.3)	0.6 (0.4-0.7)	0.3 (0.2-0.4)	0.2 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)	0.0 (0.0-0.0)
2	18 (11-25)	10 (6.1-14)	5.5 (3.3-8.0)	3.0 (1.8-4.4)	1.6 (1.0-2.4)	0.9 (0.5-1.3)	0.5 (0.3-0.7)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
3	26 (16-39)	15 (9.1-23)	8.5 (5.0-13)	4.7 (2.7-7.4)	2.5 (1.5-4.0)	1.4 (0.8-2.2)	0.7 (0.4-1.2)	0.4 (0.2-0.7)	0.2 (0.1-0.4)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
4	38 (27-53)	23 (15-33)	13 (8.5-20)	7.2 (4.7-11)	3.9 (2.5-6.1)	2.1 (1.4-3.3)	1.1 (0.7-1.8)	0.6 (0.4-1.0)	0.4 (0.2-0.6)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
5	51 (43-65)	33 (27-44)	19 (15-27)	11 (8.5-15)	6.0 (4.7-8.6)	3.3 (2.5-4.7)	1.8 (1.4-2.6)	1.0 (0.8-1.4)	0.5 (0.4-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.2)
6	67	45	28	16	9.0	4.9	2.7	1.5	0.8	0.5	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	8.1	4.6	2.6	1.4	0.8	0.5	0.3	0.2	0.1	0.1	0.0
1	12 (8.5-14)	7.1 (4.8-8.4)	4.0 (2.7-4.8)	2.3 (1.5-2.7)	1.3 (0.9-1.5)	0.7 (0.5-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)	0.0 (0.0-0.1)
2	18 (12-25)	11 (6.8-15)	6.2 (3.8-8.5)	3.5 (2.2-4.8)	2.0 (1.2-2.7)	1.1 (0.7-1.5)	0.6 (0.4-0.9)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.0-0.1)
3	27 (18-38)	16 (10-24)	9.3 (5.8-14)	5.3 (3.3-8.1)	3.0 (1.8-4.6)	1.7 (1.0-2.6)	1.0 (0.6-1.5)	0.6 (0.3-0.9)	0.3 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
4	38 (28-51)	23 (17-34)	14 (9.7-21)	8.1 (5.6-12)	4.6 (3.1-6.9)	2.6 (1.8-3.9)	1.5 (1.0-2.2)	0.9 (0.6-1.3)	0.5 (0.3-0.8)	0.3 (0.2-0.4)	0.2 (0.1-0.3)
5	51 (45-63)	33 (28-44)	20 (17-28)	12 (9.9-17)	6.9 (5.6-9.7)	3.9 (3.2-5.5)	2.2 (1.8-3.2)	1.3 (1.1-1.9)	0.7 (0.6-1.1)	0.4 (0.4-0.6)	0.3 (0.2-0.4)
6	65	45	29	17	10	5.8	3.3	1.9	1.1	0.7	0.4

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

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	10	5.9	3.5	2.0	1.2	0.7	0.4	0.3	0.2	0.1	0.1
1	15 (11-18)	9.0 (6.2-11)	5.3 (3.7-6.3)	3.1 (2.1-3.7)	1.8 (1.2-2.2)	1.1 (0.7-1.3)	0.6 (0.4-0.8)	0.4 (0.3-0.5)	0.2 (0.2-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.1)
2	22 (15-28)	13 (8.8-17)	8.0 (5.2-10)	4.7 (3.0-6.2)	2.8 (1.8-3.7)	1.6 (1.0-2.1)	1.0 (0.6-1.3)	0.6 (0.4-0.8)	0.4 (0.2-0.5)	0.2 (0.1-0.3)	0.1 (0.1-0.2)
3	31 (21-41)	19 (13-27)	12 (7.8-17)	7.1 (4.6-10)	4.2 (2.7-6.0)	2.4 (1.6-3.6)	1.5 (0.9-2.2)	0.9 (0.6-1.3)	0.5 (0.3-0.8)	0.3 (0.2-0.5)	0.2 (0.1-0.3)
4	42 (33-55)	27 (21-38)	17 (13-24)	10 (7.6-15)	6.2 (4.5-9.1)	3.6 (2.6-5.4)	2.2 (1.6-3.3)	1.3 (1.0-2.0)	0.8 (0.6-1.2)	0.5 (0.3-0.7)	0.3 (0.2-0.4)
5	54 (48-66)	38 (32-48)	24 (21-33)	15 (13-21)	9.1 (7.5-13)	5.4 (4.4-7.6)	3.3 (2.7-4.6)	2.0 (1.6-2.8)	1.2 (1.0-1.7)	0.7 (0.6-1.0)	0.4 (0.4-0.6)
6	68	50	34	22	13	7.9	4.9	3.0	1.8	1.1	0.7

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	14	8.5	5.3	3.2	2.0	1.2	0.8	0.5	0.3	0.2	0.1
1	22 (19-27)	14 (12-17)	8.7 (7.4-11)	5.3 (4.5-6.8)	3.3 (2.8-4.1)	2.0 (1.7-2.6)	1.3 (1.1-1.6)	0.8 (0.7-1.0)	0.5 (0.4-0.6)	0.3 (0.3-0.4)	0.2 (0.2-0.3)
2	33 (27-42)	22 (17-29)	14 (11-19)	8.8 (6.8-12)	5.4 (4.2-7.4)	3.4 (2.6-4.6)	2.1 (1.6-2.9)	1.3 (1.0-1.9)	0.8 (0.6-1.2)	0.5 (0.4-0.7)	0.3 (0.3-0.5)
3	47 (38-56)	33 (26-41)	22 (17-28)	14 (10-19)	8.9 (6.4-12)	5.6 (4.0-7.5)	3.5 (2.5-4.8)	2.2 (1.6-3.1)	1.4 (1.0-1.9)	0.9 (0.6-1.2)	0.6 (0.4-0.8)
4	63 (53-69)	48 (38-55)	33 (26-40)	22 (17-27)	14 (10-18)	9.1 (6.6-11)	5.8 (4.2-7.3)	3.7 (2.7-4.7)	2.4 (1.7-3.0)	1.5 (1.1-1.9)	0.9 (0.7-1.2)
5	76 (70-79)	63 (55-68)	48 (40-52)	34 (27-38)	22 (18-25)	15 (11-17)	9.5 (7.4-11)	6.1 (4.7-7.1)	3.9 (3.0-4.5)	2.5 (1.9-2.9)	1.6 (1.2-1.8)
6	85	77	63	48	34	23	15	9.9	6.4	4.1	2.6

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

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	18	12	7.5	4.8	3.1	2.0	1.3	0.9	0.6	0.4	0.3
1	30 (24-54)	21 (16-40)	14 (11-28)	9.4 (6.8-19)	6.1 (4.4-13)	4.1 (2.9-8.6)	2.7 (1.9-5.7)	1.8 (1.3-3.8)	1.2 (0.8-2.5)	0.8 (0.5-1.7)	0.5 (0.4-1.1)
2	46 (32-69)	34 (22-57)	24 (15-43)	17 (9.6-31)	11 (6.2-21)	7.5 (4.1-15)	5.1 (2.7-10)	3.4 (1.8-6.7)	2.2 (1.2-4.5)	1.5 (0.8-3.0)	1.0 (0.5-2.0)
3	62 (43-79)	50 (31-69)	38 (21-56)	28 (14-43)	19 (9.3-31)	13 (6.2-22)	9.1 (4.1-15)	6.1 (2.7-11)	4.1 (1.8-7.1)	2.7 (1.2-4.8)	1.8 (0.8-3.2)
4	75 (57-84)	66 (43-77)	54 (31-67)	42 (22-55)	31 (14-42)	22 (9.8-31)	16 (6.6-22)	11 (4.4-16)	7.2 (2.9-11)	4.8 (1.9-7.2)	3.2 (1.3-4.8)
5	84 (70-88)	78 (58-83)	70 (45-75)	59 (33-65)	46 (23-52)	35 (16-40)	25 (11-30)	18 (7.6-21)	12 (5.1-15)	8.3 (3.4-10)	5.6 (2.3-6.8)
6	89	86	81	74	63	51	39	28	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	9.4	6.4	4.4	3.0	2.1	1.5	1.0	0.7	0.5
1	32 (25-57)	24 (18-45)	17 (12-34)	12 (8.3-25)	8.3 (5.7-17)	5.9 (4.0-13)	4.1 (2.8-8.9)	2.9 (1.9-6.2)	2.0 (1.3-4.4)	1.4 (0.9-3.0)	1.0 (0.6-2.1)
2	47 (33-69)	37 (24-59)	28 (17-48)	20 (12-37)	15 (8.0-27)	11 (5.6-20)	7.5 (3.9-15)	5.3 (2.7-11)	3.7 (1.9-7.5)	2.6 (1.3-5.2)	1.8 (0.9-3.7)
3	61 (43-77)	51 (33-70)	41 (24-60)	32 (17-49)	24 (12-38)	18 (8.4-29)	13 (5.9-21)	9.3 (4.1-16)	6.6 (2.9-11)	4.6 (2.0-8.0)	3.2 (1.4-5.7)
4	73 (55-82)	65 (44-77)	56 (34-69)	46 (25-59)	36 (18-49)	28 (13-39)	21 (9.2-30)	15 (6.5-23)	11 (4.5-17)	7.9 (3.2-12)	5.6 (2.2-8.5)
5	81 (66-85)	76 (57-81)	69 (46-75)	60 (36-67)	51 (27-58)	41 (20-49)	32 (15-39)	24 (11-30)	18 (7.6-22)	13 (5.4-16)	9.4 (3.8-12)
6	86	84	79	73	65	56	46	37	28	21	15

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

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	7.2	5.3	3.9	2.9	2.1	1.5	1.1	0.8
1	30 (24-54)	23 (18-44)	18 (13-35)	13 (9.3-27)	9.8 (6.9-21)	7.3 (5.1-16)	5.5 (3.7-12)	4.0 (2.7-8.8)	3.0 (2.0-6.5)	2.2 (1.5-4.8)	1.6 (1.1-3.5)
2	44 (31-65)	35 (24-56)	28 (18-47)	22 (13-38)	17 (9.6-30)	13 (7.1-24)	9.7 (5.3-18)	7.3 (3.9-14)	5.4 (2.8-11)	4.0 (2.1-7.9)	2.9 (1.5-5.8)
3	57 (40-73)	49 (32-66)	41 (24-58)	33 (18-49)	26 (14-41)	21 (10-33)	16 (7.8-26)	12 (5.8-20)	9.3 (4.3-16)	6.9 (3.1-12)	5.2 (2.3-8.7)
4	69 (50-79)	62 (42-74)	54 (33-67)	46 (26-59)	39 (20-50)	32 (15-42)	25 (12-35)	20 (8.7-28)	15 (6.5-22)	12 (4.8-17)	8.7 (3.5-13)
5	77 (61-82)	73 (53-78)	67 (44-73)	59 (36-66)	52 (29-59)	45 (23-51)	37 (18-43)	30 (14-36)	24 (10-29)	18 (7.7-23)	14 (5.8-17)
6	83	81	77	72	65	59	51	43	35	28	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	14	11	8.3	6.3	4.9	3.8	3.0	2.3	1.8	1.4	1.0
1	24 (18-45)	19 (14-37)	15 (11-30)	12 (8.2-24)	9.1 (6.4-19)	7.2 (5.0-15)	5.6 (3.9-12)	4.4 (3.0-9.6)	3.4 (2.3-7.5)	2.6 (1.8-5.8)	2.0 (1.4-4.5)
2	36 (24-56)	30 (19-48)	24 (15-41)	19 (11-34)	16 (9.0-28)	12 (7.0-23)	9.9 (5.5-19)	7.8 (4.3-15)	6.1 (3.3-12)	4.8 (2.5-9.3)	3.7 (2.0-7.3)
3	49 (32-66)	42 (26-59)	35 (20-52)	29 (16-45)	25 (13-38)	20 (10-32)	16 (7.9-26)	13 (6.2-21)	10 (4.9-17)	8.2 (3.8-14)	6.4 (2.9-11)
4	61 (42-73)	55 (35-67)	48 (28-61)	42 (23-54)	36 (18-47)	30 (15-41)	25 (12-34)	21 (9.3-29)	17 (7.3-23)	13 (5.7-19)	11 (4.4-15)
5	71 (52-77)	67 (45-73)	61 (38-67)	55 (32-61)	49 (26-56)	43 (22-49)	37 (18-43)	31 (14-37)	26 (11-31)	21 (8.9-25)	17 (7.0-21)
6	78	76	72	67	62	57	50	44	37	31	26