Kuwait - 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 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 Kuwait. 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	18	11	7.1	4.9	3.6	2.8	2.3	2.0	1.8	1.7	1.6
1	26 (22-33)	17 (15-21)	11 (9.5-14)	7.5 (6.3-9.5)	5.5 (4.3-6.9)	4.3 (3.1-5.4)	3.5 (2.4-4.6)	3.0 (2.0-4.0)	2.7 (1.8-3.7)	2.5 (1.6-3.5)	2.4 (1.6-3.4)
2	38 (29-51)	25 (19-35)	16 (13-23)	11 (8.5-16)	8.3 (5.7-12)	6.4 (4.0-9.9)	5.2 (3.1-8.5)	4.4 (2.5-7.4)	4.0 (2.1-6.8)	3.7 (1.9-6.5)	3.6 (1.8-6.2)
3	52 (38-67)	36 (26-47)	24 (17-31)	17 (12-24)	12 (7.6-19)	9.4 (5.4-16)	7.7 (4.0-14)	6.5 (3.2-12)	5.8 (2.7-11)	5.4 (2.5-10)	5.2 (2.4-10)
4	67 (51-80)	49 (34-61)	34 (23-42)	24 (16-31)	18 (12-24)	14 (8.9-20)	11 (6.7-17)	9.3 (5.3-15)	8.2 (4.5-14)	7.8 (4.1-13)	7.4 (3.8-13)
5	80 (71-88)	63 (53-72)	46 (37-53)	33 (26-38)	25 (19-30)	19 (15-24)	15 (12-21)	13 (9.9-18)	12 (8.4-16)	11 (7.6-15)	10 (7.1-15)
6	90	77	60	45	34	26	21	18	16	15	14

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

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	19	12	8.2	5.7	4.2	3.3	2.6	2.2	2.0	1.8	1.7
1	28 (24-34)	19 (17-22)	12 (11-15)	8.7 (7.4-11)	6.4 (5.1-7.8)	4.9 (3.7-6.0)	4.0 (2.8-5.1)	3.3 (2.3-4.4)	3.0 (2.0-4.0)	2.7 (1.8-3.8)	2.6 (1.7-3.6)
2	40 (31-52)	27 (22-36)	18 (15-25)	13 (10-17)	9.5 (6.8-13)	7.3 (4.8-11)	5.8 (3.6-9.1)	4.8 (2.8-7.9)	4.3 (2.4-7.3)	4.0 (2.2-6.8)	3.8 (2.0-6.5)
3	54 (41-66)	38 (29-48)	26 (20-34)	19 (14-26)	14 (9.1-21)	11 (6.4-17)	8.5 (4.7-15)	7.0 (3.7-13)	6.3 (3.1-12)	5.8 (2.8-11)	5.5 (2.6-10)
4	67 (54-78)	51 (38-61)	37 (26-44)	26 (18-33)	20 (13-27)	15 (10-22)	12 (7.8-19)	10 (6.0-16)	8.9 (5.1-15)	8.3 (4.5-14)	7.8 (4.2-13)
5	80 (73-86)	65 (56-72)	49 (41-55)	36 (29-41)	27 (22-32)	21 (17-26)	17 (13-22)	14 (11-19)	12 (9.2-17)	11 (8.2-16)	11 (7.5-15)
6	88	77	62	48	37	29	23	19	17	16	15

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	19	13	8.6	6.2	4.6	3.5	2.8	2.3	2.1	1.9	1.8
1	27 (24-31)	18 (17-21)	13 (12-15)	9.2 (7.9-11)	6.8 (5.5-8.0)	5.3 (4.0-6.4)	4.2 (3.1-5.3)	3.4 (2.4-4.5)	3.1 (2.1-4.2)	2.8 (1.9-3.9)	2.6 (1.7-3.6)
2	37 (31-47)	26 (22-34)	19 (15-24)	13 (11-18)	10 (7.4-13)	7.7 (5.3-11)	6.1 (3.9-9.2)	5.0 (3.0-7.9)	4.5 (2.6-7.3)	4.1 (2.3-6.8)	3.8 (2.0-6.3)
3	50 (40-59)	36 (28-44)	26 (20-33)	19 (15-26)	14 (10-21)	11 (7.1-17)	8.8 (5.2-15)	7.2 (4.0-12)	6.4 (3.4-11)	5.9 (3.0-11)	5.4 (2.7-10)
4	62 (51-71)	48 (37-56)	36 (27-42)	27 (19-33)	20 (14-27)	16 (11-22)	12 (8.6-19)	10 (6.5-16)	9.1 (5.5-15)	8.2 (4.8-14)	7.6 (4.2-13)
5	74 (68-80)	61 (54-67)	47 (41-52)	36 (30-41)	28 (23-33)	21 (18-27)	17 (14-22)	14 (11-19)	13 (9.5-17)	11 (8.3-16)	11 (7.4-15)
6	83	72	59	47	37	29	23	19	17	15	14

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

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	17	12	8.5	6.2	4.7	3.6	2.9	2.4	2.1	1.9	1.7
1	24 (22-27)	17 (16-19)	12 (11-14)	9.1 (7.8-10)	6.8 (5.6-7.8)	5.3 (4.1-6.3)	4.2 (3.1-5.3)	3.5 (2.5-4.5)	3.1 (2.1-4.1)	2.8 (1.9-3.8)	2.5 (1.7-3.5)
2	33 (27-40)	24 (20-30)	18 (15-22)	13 (11-16)	9.9 (7.5-13)	7.6 (5.5-11)	6.1 (4.1-8.8)	5.0 (3.2-7.6)	4.4 (2.7-6.9)	4.0 (2.3-6.4)	3.6 (2.0-5.9)
3	43 (35-51)	33 (26-39)	24 (19-30)	18 (14-24)	14 (10-20)	11 (7.4-16)	8.6 (5.5-14)	7.1 (4.2-12)	6.3 (3.5-11)	5.6 (3.0-9.9)	5.1 (2.6-9.2)
4	55 (45-61)	43 (34-49)	33 (26-38)	25 (19-31)	19 (14-25)	15 (11-21)	12 (8.7-17)	9.9 (6.8-15)	8.7 (5.6-14)	7.8 (4.8-13)	7.1 (4.1-12)
5	65 (61-71)	54 (49-59)	43 (38-47)	33 (29-38)	26 (22-31)	20 (17-25)	16 (14-21)	14 (11-18)	12 (9.3-16)	11 (7.9-15)	9.7 (7.0-14)
6	74	64	53	43	34	27	22	18	16	14	13

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	11	8.1	6.1	4.7	3.6	2.9	2.4	2.1	1.9	1.7
1	22 (19-26)	16 (14-20)	12 (10-15)	8.9 (7.3-11)	6.8 (5.4-8.3)	5.2 (4.1-6.4)	4.1 (3.1-5.0)	3.4 (2.5-4.1)	3.0 (2.1-3.5)	2.6 (1.8-3.1)	2.3 (1.6-2.8)
2	31 (25-38)	23 (18-29)	17 (14-22)	13 (9.9-17)	9.9 (7.3-13)	7.6 (5.5-10)	5.9 (4.1-7.9)	4.8 (3.3-6.5)	4.1 (2.7-5.7)	3.6 (2.3-5.0)	3.2 (2.0-4.4)
3	42 (34-51)	33 (25-41)	25 (19-32)	19 (14-25)	14 (10-20)	11 (7.4-15)	8.4 (5.6-12)	6.8 (4.4-10)	5.7 (3.6-8.7)	4.9 (3.1-7.6)	4.3 (2.6-6.8)
4	54 (46-61)	44 (36-51)	34 (27-41)	26 (20-33)	20 (15-25)	15 (11-20)	12 (8.6-16)	9.5 (6.8-13)	8.0 (5.6-11)	6.8 (4.7-9.9)	5.9 (4.0-8.8)
5	65 (58-70)	56 (48-61)	46 (38-51)	36 (30-41)	28 (23-33)	22 (17-26)	17 (13-20)	13 (11-17)	11 (8.9-14)	9.3 (7.5-12)	8.0 (6.5-11)
6	74	67	57	48	38	30	23	18	15	13	11

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

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	13	10	7.8	6.1	4.8	3.8	3.1	2.6	2.3	2.0	1.8
1	21 (16-35)	16 (12-27)	12 (9.1-21)	9.5 (7.0-16)	7.4 (5.4-12)	5.7 (4.1-8.9)	4.5 (3.2-6.7)	3.8 (2.7-5.3)	3.2 (2.3-4.2)	2.8 (1.9-3.5)	2.4 (1.7-2.9)
2	30 (21-46)	24 (16-38)	19 (12-30)	15 (9.4-23)	11 (7.2-18)	8.7 (5.6-14)	6.8 (4.3-10)	5.5 (3.5-8.1)	4.6 (2.9-6.6)	3.9 (2.5-5.3)	3.3 (2.1-4.4)
3	42 (28-56)	35 (22-48)	28 (17-39)	22 (13-31)	17 (9.9-24)	13 (7.6-19)	10 (5.8-15)	8.1 (4.7-12)	6.6 (3.9-9.6)	5.5 (3.3-8.0)	4.6 (2.8-6.7)
4	54 (37-65)	47 (30-57)	39 (23-49)	31 (18-40)	25 (14-32)	19 (11-25)	15 (8.6-20)	12 (7.0-16)	9.6 (5.8-13)	7.9 (4.9-11)	6.5 (4.2-8.8)
5	66 (46-72)	59 (39-65)	51 (32-58)	43 (25-49)	35 (20-41)	28 (16-33)	22 (13-26)	17 (10-21)	14 (8.7-17)	11 (7.4-14)	9.2 (6.4-12)
6	75	69	63	55	47	39	31	25	20	16	13

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	12	9.6	7.8	6.3	5.1	4.1	3.4	2.9	2.6	2.3	2.0
1	18 (13-31)	15 (11-25)	12 (8.5-20)	9.5 (6.8-16)	7.6 (5.4-12)	6.1 (4.3-9.7)	5.0 (3.5-7.7)	4.2 (2.9-6.3)	3.6 (2.5-5.2)	3.1 (2.2-4.3)	2.7 (1.9-3.6)
2	26 (18-40)	22 (14-33)	17 (11-27)	14 (9.1-22)	11 (7.3-18)	9.1 (5.8-14)	7.3 (4.7-11)	6.1 (3.9-9.2)	5.2 (3.3-7.6)	4.4 (2.8-6.3)	3.8 (2.4-5.3)
3	36 (23-49)	30 (19-42)	25 (15-36)	20 (12-29)	16 (9.9-24)	13 (7.8-19)	11 (6.3-15)	8.9 (5.3-13)	7.4 (4.4-10)	6.2 (3.8-8.8)	5.3 (3.2-7.5)
4	46 (30-57)	40 (25-51)	34 (20-44)	28 (17-37)	23 (13-31)	19 (11-25)	15 (8.7-20)	13 (7.4-17)	11 (6.3-14)	8.9 (5.3-12)	7.4 (4.6-9.9)
5	57 (38-64)	51 (32-58)	44 (27-51)	38 (22-44)	32 (18-38)	27 (15-32)	22 (12-26)	18 (10-22)	15 (8.8-18)	13 (7.6-16)	10 (6.6-13)
6	67	62	55	49	42	36	30	25	21	18	15

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

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	11	9.3	7.8	6.4	5.3	4.4	3.8	3.3	2.9	2.6	2.3
1	17 (12-28)	14 (9.8-23)	12 (8.1-19)	9.6 (6.6-16)	7.9 (5.4-13)	6.6 (4.5-11)	5.5 (3.8-8.8)	4.8 (3.3-7.5)	4.2 (2.8-6.3)	3.6 (2.5-5.3)	3.2 (2.1-4.5)
2	23 (16-36)	20 (13-31)	17 (11-26)	14 (8.9-22)	12 (7.3-18)	9.6 (6.0-15)	8.1 (5.1-12)	6.9 (4.4-10)	6.0 (3.8-8.9)	5.2 (3.2-7.6)	4.5 (2.8-6.5)
3	32 (20-44)	27 (17-38)	23 (14-33)	20 (12-28)	17 (9.9-24)	14 (8.2-20)	12 (6.9-17)	10 (5.9-14)	8.6 (5.1-12)	7.4 (4.4-10)	6.3 (3.8-8.9)
4	41 (26-52)	36 (22-46)	32 (19-41)	27 (16-35)	23 (13-30)	19 (11-26)	17 (9.3-22)	14 (8.0-19)	12 (6.9-16)	10 (6.0-14)	8.9 (5.2-12)
5	52 (33-58)	46 (29-53)	41 (25-48)	36 (21-42)	31 (18-37)	27 (15-32)	23 (13-28)	20 (11-24)	17 (9.5-21)	15 (8.3-18)	13 (7.3-16)
6	62	57	52	46	41	36	31	27	23	20	17

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	10	8.7	7.4	6.3	5.4	4.5	4.0	3.5	3.1	2.8	2.5
1	15 (10-25)	13 (8.9-21)	11 (7.5-18)	9.3 (6.4-16)	7.9 (5.4-13)	6.7 (4.5-11)	5.9 (3.9-9.8)	5.2 (3.5-8.5)	4.6 (3.1-7.4)	4.1 (2.7-6.5)	3.6 (2.4-5.6)
2	21 (14-32)	18 (12-28)	16 (10-25)	14 (8.5-21)	12 (7.2-18)	9.9 (6.1-16)	8.6 (5.3-14)	7.6 (4.7-12)	6.7 (4.1-10)	5.9 (3.6-9.0)	5.2 (3.2-7.8)
3	29 (18-40)	25 (15-35)	22 (13-31)	19 (11-27)	16 (9.6-24)	14 (8.2-21)	12 (7.1-18)	11 (6.3-16)	9.6 (5.5-14)	8.5 (4.9-12)	7.4 (4.3-11)
4	38 (23-47)	34 (20-43)	30 (17-39)	26 (15-34)	23 (13-30)	20 (11-26)	18 (9.7-23)	16 (8.5-21)	14 (7.5-18)	12 (6.6-16)	11 (5.8-14)
5	47 (30-54)	43 (26-50)	39 (23-45)	35 (20-41)	31 (17-37)	27 (15-33)	24 (13-29)	22 (12-26)	19 (10-24)	17 (9.1-21)	15 (8.0-19)
6	57	53	49	45	40	36	32	29	26	23	21