

Lebanon - 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 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 Lebanon. 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	6.5	4.0	2.7	1.9	1.5	1.2	1.0	0.9	0.9	0.8	0.8	
1	10 (8.6-13)	6.3 (5.5-8.1)	4.2 (3.5-5.3)	3.0 (2.3-3.7)	2.3 (1.7-2.8)	1.8 (1.3-2.4)	1.5 (1.0-2.1)	1.4 (0.9-1.9)	1.3 (0.8-1.8)	1.2 (0.8-1.7)	1.2 (0.8-1.7)	
2	16 (12-22)	9.7 (7.6-14)	6.4 (4.8-9.1)	4.5 (3.1-6.4)	3.4 (2.2-5.3)	2.7 (1.6-4.4)	2.3 (1.3-3.9)	2.1 (1.1-3.5)	1.9 (1.0-3.4)	1.8 (0.9-3.2)	1.8 (0.9-3.1)	
3	23 (16-32)	15 (10-20)	9.6 (6.7-14)	6.7 (4.2-11)	5.1 (2.9-8.6)	4.0 (2.1-7.2)	3.4 (1.7-6.3)	3.0 (1.4-5.7)	2.8 (1.3-5.5)	2.7 (1.2-5.3)	2.6 (1.2-5.1)	
4	33 (22-44)	21 (14-27)	14 (9.1-18)	9.9 (6.4-14)	7.4 (4.8-11)	5.9 (3.6-9.3)	4.9 (2.8-8.0)	4.3 (2.4-7.4)	4.1 (2.1-7.0)	3.9 (2.0-6.7)	3.7 (1.9-6.5)	
5	46 (36-55)	30 (23-36)	20 (15-23)	14 (11-17)	11 (8.0-14)	8.4 (6.3-11)	6.9 (5.2-9.6)	6.2 (4.5-8.7)	5.8 (4.0-8.3)	5.5 (3.7-7.9)	5.3 (3.5-7.6)	
6	61	42	29	20	15	12	9.7	8.6	8.0	7.6	7.3	

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

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	8.3	5.5	3.8	2.8	2.2	1.8	1.5	1.3	1.3	1.2	1.1
1	13 (11-15)	8.4 (7.4-10)	5.8 (4.9-7.1)	4.3 (3.4-5.2)	3.3 (2.4-4.1)	2.7 (1.9-3.5)	2.2 (1.5-3.0)	2.0 (1.3-2.8)	1.9 (1.2-2.6)	1.8 (1.1-2.5)	1.7 (1.1-2.4)
2	19 (15-26)	13 (10-17)	8.7 (6.6-12)	6.4 (4.5-9.0)	4.9 (3.2-7.4)	3.9 (2.4-6.2)	3.3 (1.9-5.4)	3.0 (1.6-5.0)	2.8 (1.5-4.7)	2.6 (1.4-4.5)	2.5 (1.3-4.3)
3	27 (20-36)	18 (14-24)	13 (9.1-18)	9.4 (6.0-15)	7.2 (4.2-12)	5.7 (3.1-10)	4.8 (2.4-8.6)	4.3 (2.1-8.0)	4.0 (1.9-7.6)	3.8 (1.8-7.2)	3.6 (1.6-6.8)
4	38 (27-48)	26 (18-32)	18 (13-24)	13 (9.1-19)	10 (7.0-15)	8.2 (5.2-13)	6.8 (4.0-11)	6.2 (3.5-10)	5.7 (3.1-9.7)	5.4 (2.9-9.2)	5.1 (2.7-8.8)
5	51 (43-59)	37 (30-41)	26 (21-30)	19 (15-23)	15 (11-19)	12 (9.1-15)	9.6 (7.4-13)	8.7 (6.3-12)	8.0 (5.6-11)	7.5 (5.2-11)	7.1 (4.8-10)
6	65	49	36	26	20	16	13	12	11	10	9.8

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	7.6	5.4	4.0	3.2	2.5	2.2	2.0	1.8	1.7	1.6
1	16 (15-19)	11 (10-13)	8.1 (6.7-9.5)	6.0 (4.7-7.2)	4.7 (3.5-5.9)	3.8 (2.7-4.9)	3.2 (2.2-4.3)	2.9 (1.9-4.0)	2.7 (1.8-3.7)	2.5 (1.6-3.5)	2.3 (1.5-3.3)
2	24 (20-31)	16 (13-22)	12 (9.1-16)	8.9 (6.3-12)	6.9 (4.5-10)	5.5 (3.4-8.6)	4.7 (2.7-7.5)	4.2 (2.4-7.0)	3.9 (2.1-6.5)	3.6 (1.9-6.1)	3.4 (1.8-5.7)
3	33 (26-41)	24 (18-31)	17 (12-24)	13 (8.4-20)	9.9 (6.0-16)	8.0 (4.5-14)	6.8 (3.6-12)	6.1 (3.1-11)	5.6 (2.7-10)	5.2 (2.5-9.7)	4.8 (2.3-9.1)
4	45 (34-53)	33 (24-39)	24 (17-31)	18 (13-25)	14 (9.9-21)	11 (7.4-17)	9.6 (5.9-15)	8.6 (5.0-14)	7.9 (4.4-13)	7.3 (4.0-12)	6.8 (3.7-12)
5	58 (51-64)	44 (37-48)	33 (27-38)	25 (21-30)	19 (16-25)	16 (13-21)	13 (10-18)	12 (8.7-17)	11 (7.7-15)	10 (7.0-14)	9.5 (6.4-14)
6	71	56	43	34	26	21	18	16	15	14	13

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

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	14	9.9	7.2	5.5	4.2	3.4	2.9	2.6	2.4	2.2	2.0
1	20 (19-23)	14 (13-16)	11 (8.9-12)	8.0 (6.3-9.6)	6.2 (4.7-7.8)	5.0 (3.6-6.5)	4.3 (3.0-5.8)	3.9 (2.6-5.3)	3.5 (2.3-4.9)	3.2 (2.1-4.5)	2.9 (1.9-4.2)
2	28 (24-35)	21 (17-26)	15 (12-19)	12 (8.4-16)	9.0 (6.1-13)	7.2 (4.5-11)	6.2 (3.7-9.7)	5.6 (3.2-8.9)	5.0 (2.8-8.2)	4.6 (2.5-7.6)	4.2 (2.3-7.0)
3	38 (31-46)	29 (23-37)	21 (16-30)	16 (11-24)	13 (8.1-20)	10 (6.0-17)	8.9 (4.9-15)	7.9 (4.2-14)	7.2 (3.6-13)	6.5 (3.2-12)	6.0 (2.9-11)
4	50 (40-56)	38 (30-46)	29 (22-37)	23 (17-31)	18 (13-25)	14 (9.8-21)	12 (8.0-19)	11 (6.7-18)	10 (5.8-16)	9.1 (5.2-15)	8.4 (4.7-14)
5	62 (57-66)	49 (44-54)	39 (34-45)	30 (26-37)	24 (20-30)	19 (16-25)	17 (13-23)	15 (11-21)	14 (9.7-19)	12 (8.7-18)	12 (7.9-16)
6	73	61	49	40	32	26	23	20	18	17	16

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	19	14	10	7.7	6.0	4.9	4.2	3.7	3.3	3.0	2.7
1	27 (23-32)	20 (17-24)	15 (12-17)	11 (8.8-13)	8.5 (6.6-10)	6.9 (5.1-8.1)	5.9 (4.3-6.9)	5.1 (3.7-6.0)	4.5 (3.2-5.4)	4.1 (2.8-4.9)	3.7 (2.5-4.4)
2	37 (31-46)	28 (22-35)	21 (16-27)	16 (12-21)	12 (8.5-16)	9.6 (6.6-13)	8.1 (5.4-11)	7.1 (4.5-9.6)	6.2 (3.9-8.5)	5.5 (3.4-7.6)	5.0 (3.0-6.9)
3	50 (40-60)	39 (29-49)	29 (21-39)	22 (15-31)	17 (11-24)	13 (8.7-20)	11 (7.1-17)	9.6 (5.9-15)	8.4 (5.1-13)	7.5 (4.5-12)	6.7 (3.9-11)
4	63 (54-70)	51 (41-59)	40 (31-48)	31 (23-38)	23 (17-31)	18 (14-25)	15 (11-22)	13 (9.3-19)	11 (8.0-17)	10 (6.9-15)	9.0 (6.2-14)
5	74 (67-78)	63 (56-69)	52 (45-58)	41 (35-47)	32 (27-38)	25 (21-31)	21 (17-26)	18 (15-23)	15 (13-20)	13 (11-18)	12 (9.8-16)
6	81	74	64	53	42	34	28	23	20	17	15

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

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	25	19	14	11	8.6	7.2	6.2	5.4	4.7	4.2	3.7
1	36 (29-53)	28 (22-42)	21 (16-31)	16 (12-23)	12 (9.3-17)	10 (7.5-13)	8.6 (6.3-10)	7.3 (5.3-8.4)	6.3 (4.6-7.4)	5.5 (4.0-6.6)	4.9 (3.5-5.9)
2	49 (37-65)	39 (28-55)	31 (21-44)	24 (16-34)	18 (12-26)	15 (9.7-20)	12 (7.9-16)	10 (6.6-13)	8.5 (5.6-11)	7.3 (4.8-10)	6.4 (4.2-9.0)
3	61 (47-74)	52 (37-65)	42 (28-56)	33 (21-45)	26 (16-36)	21 (13-29)	17 (10-23)	14 (8.6-19)	11 (7.3-16)	9.7 (6.3-14)	8.4 (5.5-12)
4	72 (57-80)	64 (47-74)	55 (38-65)	45 (30-55)	36 (23-45)	29 (19-36)	23 (16-30)	19 (13-25)	16 (11-21)	13 (9.5-18)	11 (8.3-15)
5	79 (67-84)	74 (59-79)	67 (50-73)	58 (41-64)	48 (33-54)	39 (27-45)	32 (23-37)	26 (19-31)	21 (17-26)	17 (14-22)	15 (13-18)
6	85	81	76	69	60	51	43	35	28	23	19

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	30	23	18	14	12	9.7	8.2	7.0	6.1	5.3	4.6
1	40 (33-58)	33 (26-48)	26 (20-39)	21 (16-30)	16 (12-24)	14 (10-19)	11 (8.3-15)	9.6 (7.0-12)	8.2 (5.9-9.9)	7.0 (5.0-8.1)	6.1 (4.4-7.0)
2	51 (41-67)	44 (33-59)	36 (26-50)	29 (20-41)	23 (16-33)	19 (13-27)	16 (11-22)	13 (8.8-18)	11 (7.4-15)	9.4 (6.3-12)	8.1 (5.3-10)
3	62 (49-73)	54 (41-67)	47 (33-59)	39 (26-51)	32 (21-42)	26 (17-35)	22 (14-30)	18 (12-25)	15 (9.7-21)	13 (8.2-17)	11 (7.0-15)
4	70 (57-78)	64 (50-73)	57 (42-67)	49 (34-59)	42 (28-51)	35 (23-44)	30 (19-37)	25 (16-31)	20 (14-26)	17 (12-22)	14 (10-19)
5	77 (65-82)	72 (58-78)	67 (51-73)	60 (43-67)	53 (37-60)	46 (31-53)	39 (27-46)	33 (23-39)	27 (20-33)	23 (17-28)	19 (15-23)
6	82	79	75	69	63	56	50	43	36	30	25

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

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	32	26	21	17	14	12	9.8	8.3	7.1	6.0	5.2
1	42 (34-58)	35 (28-51)	29 (22-44)	24 (18-36)	20 (15-30)	17 (12-25)	14 (10-20)	12 (8.4-17)	9.9 (7.0-14)	8.3 (5.9-11)	7.1 (5.0-9.1)
2	51 (41-66)	45 (34-60)	39 (28-53)	32 (23-45)	27 (19-39)	23 (16-33)	20 (13-28)	16 (11-24)	14 (9.1-20)	12 (7.6-16)	9.7 (6.4-13)
3	61 (48-72)	55 (42-67)	48 (35-61)	42 (30-54)	36 (25-48)	31 (21-42)	27 (17-36)	23 (14-31)	19 (12-26)	16 (10-22)	13 (8.4-18)
4	69 (56-77)	64 (49-73)	58 (43-67)	52 (37-61)	46 (32-56)	41 (27-50)	35 (23-44)	30 (20-38)	26 (17-33)	22 (14-28)	18 (12-24)
5	75 (63-80)	71 (57-77)	67 (51-73)	61 (45-68)	56 (39-63)	50 (35-58)	45 (30-52)	39 (26-46)	34 (23-41)	29 (19-35)	25 (17-30)
6	80	78	74	70	65	60	55	49	43	38	32

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	31	26	21	18	15	13	11	8.9	7.4	6.2	5.2
1	41 (33-57)	35 (27-52)	30 (23-46)	25 (19-40)	22 (16-35)	18 (14-30)	16 (11-26)	13 (9.5-22)	11 (7.9-18)	9.3 (6.6-15)	7.8 (5.5-12)
2	50 (39-65)	45 (34-60)	39 (29-55)	34 (24-49)	30 (21-44)	26 (18-39)	22 (15-34)	19 (13-29)	16 (11-25)	14 (8.9-21)	11 (7.4-18)
3	59 (47-71)	54 (41-67)	49 (36-62)	44 (31-57)	39 (27-52)	35 (23-47)	31 (20-42)	27 (17-37)	23 (14-32)	19 (12-28)	16 (10-23)
4	67 (54-76)	63 (49-72)	58 (43-68)	53 (38-63)	49 (33-59)	44 (29-54)	40 (26-50)	35 (22-45)	31 (19-40)	27 (16-35)	23 (14-30)
5	73 (62-78)	71 (57-76)	67 (51-73)	63 (46-69)	59 (41-65)	54 (37-61)	50 (33-57)	45 (29-52)	40 (25-47)	36 (21-42)	31 (18-37)
6	77	76	74	71	68	64	60	55	50	45	41