

Zimbabwe - 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 Zimbabwe. 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	5.2	3.4	2.4	1.8	1.4	1.2	1.1	1.0	1.0	0.9
1	13 (11-17)	8.1 (7.1-10)	5.2 (4.5-6.7)	3.7 (2.9-4.6)	2.7 (2.0-3.5)	2.2 (1.5-2.8)	1.8 (1.2-2.4)	1.6 (1.1-2.2)	1.5 (1.0-2.1)	1.5 (0.9-2.1)	1.4 (0.9-2.0)
2	20 (15-28)	12 (9.5-18)	8.0 (6.1-11)	5.5 (3.9-7.8)	4.1 (2.7-6.3)	3.3 (1.9-5.3)	2.7 (1.5-4.5)	2.4 (1.3-4.2)	2.3 (1.2-4.0)	2.2 (1.1-3.8)	2.1 (1.1-3.7)
3	29 (20-39)	18 (13-24)	12 (8.4-17)	8.2 (5.4-13)	6.1 (3.6-10)	4.8 (2.6-8.4)	4.0 (2.0-7.3)	3.5 (1.7-6.7)	3.3 (1.5-6.3)	3.1 (1.4-6.1)	3.0 (1.4-5.9)
4	40 (28-52)	26 (17-33)	17 (11-22)	12 (7.8-16)	8.8 (5.8-13)	6.9 (4.3-11)	5.7 (3.3-9.3)	5.1 (2.8-8.5)	4.7 (2.5-8.1)	4.5 (2.3-7.8)	4.3 (2.2-7.5)
5	53 (43-63)	37 (28-43)	25 (19-28)	17 (13-20)	13 (9.4-16)	9.8 (7.4-13)	8.1 (6.0-11)	7.1 (5.2-10)	6.7 (4.7-9.6)	6.3 (4.3-9.2)	6.1 (4.1-8.8)
6	67	49	34	24	18	14	11	9.9	9.2	8.7	8.4

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

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	8.9	5.7	3.8	2.7	2.1	1.6	1.4	1.2	1.1	1.1	1.0
1	13 (12-16)	8.7 (7.7-11)	5.8 (5.0-7.2)	4.2 (3.4-5.1)	3.1 (2.4-3.8)	2.5 (1.8-3.2)	2.0 (1.4-2.7)	1.8 (1.2-2.5)	1.7 (1.1-2.4)	1.6 (1.0-2.2)	1.5 (1.0-2.1)
2	20 (16-27)	13 (10-18)	8.8 (6.9-12)	6.2 (4.5-8.5)	4.7 (3.1-6.9)	3.7 (2.3-5.7)	3.0 (1.7-4.9)	2.7 (1.5-4.5)	2.5 (1.3-4.3)	2.3 (1.2-4.0)	2.2 (1.1-3.8)
3	29 (21-37)	19 (14-24)	13 (9.4-18)	9.1 (6.2-14)	6.8 (4.2-11)	5.3 (3.0-9.2)	4.4 (2.3-7.8)	3.9 (2.0-7.2)	3.6 (1.7-6.8)	3.4 (1.6-6.4)	3.2 (1.5-6.1)
4	39 (28-49)	27 (19-33)	18 (13-23)	13 (8.9-18)	9.8 (6.6-14)	7.7 (5.0-12)	6.2 (3.8-10)	5.6 (3.2-9.3)	5.1 (2.8-8.7)	4.8 (2.6-8.3)	4.6 (2.4-7.9)
5	52 (44-60)	37 (30-43)	26 (21-29)	19 (15-22)	14 (11-17)	11 (8.4-14)	8.8 (6.8-12)	7.8 (5.8-11)	7.2 (5.1-10)	6.7 (4.6-9.7)	6.4 (4.3-9.2)
6	65	49	35	26	19	15	12	11	9.9	9.2	8.7

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	8.9	5.9	4.1	3.0	2.2	1.8	1.5	1.3	1.2	1.1	1.0
1	13 (12-15)	8.8 (8.0-10)	6.1 (5.2-7.2)	4.4 (3.6-5.2)	3.3 (2.5-4.1)	2.6 (1.9-3.4)	2.2 (1.5-2.9)	2.0 (1.3-2.7)	1.8 (1.2-2.5)	1.7 (1.1-2.3)	1.5 (1.0-2.2)
2	19 (15-25)	13 (11-17)	9.0 (7.1-12)	6.5 (4.8-8.8)	4.9 (3.4-7.1)	3.8 (2.4-5.9)	3.2 (1.9-5.1)	2.9 (1.6-4.7)	2.6 (1.4-4.4)	2.4 (1.3-4.1)	2.2 (1.2-3.8)
3	27 (21-34)	19 (14-24)	13 (9.9-18)	9.4 (6.5-14)	7.1 (4.5-11)	5.6 (3.3-9.3)	4.6 (2.5-8.1)	4.1 (2.1-7.4)	3.7 (1.9-6.9)	3.5 (1.7-6.5)	3.2 (1.5-6.1)
4	37 (28-44)	26 (19-31)	18 (13-23)	13 (9.5-18)	10 (7.1-15)	7.9 (5.4-12)	6.5 (4.1-10)	5.8 (3.4-9.5)	5.3 (3.0-8.8)	4.9 (2.7-8.3)	4.5 (2.4-7.8)
5	48 (42-55)	35 (30-40)	25 (21-29)	19 (15-22)	14 (11-18)	11 (8.8-14)	9.1 (7.2-12)	8.1 (6.0-11)	7.3 (5.2-10)	6.8 (4.7-9.7)	6.3 (4.3-9.1)
6	61	46	34	25	19	15	12	11	10.0	9.2	8.6

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

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	8.6	5.9	4.2	3.1	2.3	1.8	1.5	1.4	1.2	1.1	1.0
1	13 (12-14)	8.7 (7.7-9.8)	6.1 (5.2-7.0)	4.5 (3.6-5.2)	3.4 (2.6-4.2)	2.7 (1.9-3.4)	2.3 (1.6-3.0)	2.0 (1.4-2.7)	1.8 (1.2-2.5)	1.6 (1.1-2.3)	1.5 (1.0-2.1)
2	18 (15-22)	12 (10-16)	8.9 (7.1-11)	6.5 (4.9-8.7)	4.9 (3.5-7.0)	3.8 (2.5-5.7)	3.3 (2.0-5.1)	2.9 (1.7-4.6)	2.6 (1.5-4.2)	2.4 (1.3-3.9)	2.2 (1.2-3.6)
3	25 (20-30)	18 (14-22)	13 (9.8-17)	9.3 (6.7-14)	7.0 (4.7-11)	5.5 (3.4-9.0)	4.7 (2.7-8.0)	4.1 (2.2-7.2)	3.7 (1.9-6.6)	3.4 (1.7-6.1)	3.1 (1.5-5.7)
4	34 (26-39)	24 (18-29)	18 (13-22)	13 (9.6-18)	9.9 (7.2-14)	7.7 (5.5-12)	6.6 (4.3-10)	5.8 (3.5-9.3)	5.2 (3.0-8.5)	4.7 (2.6-7.9)	4.3 (2.4-7.3)
5	44 (39-49)	32 (28-36)	24 (21-28)	18 (15-22)	14 (11-17)	11 (8.8-14)	9.0 (7.2-12)	7.9 (5.9-11)	7.1 (5.1-10)	6.4 (4.5-9.3)	5.9 (4.0-8.6)
6	54	42	32	24	18	14	12	11	9.6	8.7	8.0

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	8.3	5.8	4.2	3.1	2.4	1.9	1.6	1.4	1.2	1.1	1.0
1	12 (11-15)	8.7 (7.4-11)	6.3 (5.1-7.6)	4.6 (3.6-5.5)	3.4 (2.6-4.1)	2.7 (2.0-3.2)	2.3 (1.7-2.7)	1.9 (1.4-2.3)	1.7 (1.2-2.0)	1.5 (1.1-1.8)	1.4 (0.9-1.6)
2	18 (15-24)	13 (10-17)	9.2 (7.0-12)	6.7 (4.9-8.8)	4.9 (3.5-6.5)	3.8 (2.6-5.1)	3.2 (2.1-4.3)	2.7 (1.7-3.7)	2.3 (1.5-3.3)	2.1 (1.3-2.9)	1.9 (1.1-2.6)
3	27 (20-34)	19 (14-25)	14 (9.6-19)	9.7 (6.7-14)	7.1 (4.8-10)	5.4 (3.5-8.1)	4.5 (2.8-6.8)	3.7 (2.3-5.8)	3.2 (1.9-5.1)	2.8 (1.7-4.5)	2.5 (1.5-4.0)
4	37 (29-44)	27 (21-33)	20 (15-24)	14 (10-18)	10 (7.5-14)	7.7 (5.6-11)	6.2 (4.4-8.9)	5.2 (3.6-7.6)	4.4 (3.0-6.6)	3.8 (2.6-5.8)	3.4 (2.3-5.2)
5	49 (42-54)	38 (31-42)	28 (22-31)	20 (16-23)	15 (12-18)	11 (8.8-14)	8.7 (7.0-11)	7.1 (5.8-9.3)	6.0 (4.9-8.0)	5.2 (4.2-7.0)	4.5 (3.7-6.2)
6	62	50	38	28	21	15	12	9.8	8.1	6.9	6.0

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

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	7.8	5.7	4.2	3.2	2.5	2.0	1.7	1.5	1.3	1.1	1.0
1	13 (9.6-21)	9.1 (6.8-15)	6.6 (4.9-11)	4.9 (3.6-7.5)	3.6 (2.7-5.3)	2.9 (2.1-4.0)	2.4 (1.7-3.1)	2.0 (1.5-2.4)	1.7 (1.2-2.1)	1.5 (1.1-1.8)	1.3 (0.9-1.6)
2	20 (13-32)	14 (9.2-23)	10 (6.7-17)	7.5 (4.8-12)	5.5 (3.5-8.4)	4.3 (2.8-6.3)	3.5 (2.2-4.9)	2.8 (1.8-3.8)	2.4 (1.5-3.1)	2.0 (1.3-2.8)	1.8 (1.1-2.5)
3	29 (18-42)	22 (13-31)	16 (9.1-23)	11 (6.6-17)	8.3 (4.8-12)	6.3 (3.7-9.3)	5.0 (3.0-7.3)	4.0 (2.4-5.8)	3.3 (2.0-4.7)	2.7 (1.7-3.9)	2.3 (1.5-3.3)
4	42 (25-52)	32 (18-41)	24 (13-31)	17 (9.6-23)	12 (7.1-16)	9.4 (5.6-12)	7.3 (4.5-9.7)	5.7 (3.7-7.7)	4.6 (3.1-6.3)	3.7 (2.6-5.2)	3.1 (2.3-4.4)
5	55 (34-61)	44 (26-50)	34 (19-39)	26 (14-30)	19 (11-22)	14 (8.5-17)	11 (6.9-13)	8.2 (5.7-10)	6.4 (4.8-8.1)	5.2 (4.1-6.6)	4.2 (3.6-5.5)
6	67	58	47	36	27	21	16	12	9.2	7.2	5.8

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	6.9	5.3	4.0	3.1	2.5	2.1	1.8	1.5	1.3	1.1	1.0
1	11 (7.9-18)	8.0 (5.8-13)	6.1 (4.4-9.7)	4.6 (3.3-7.0)	3.6 (2.5-5.2)	2.9 (2.1-4.1)	2.4 (1.7-3.2)	2.1 (1.4-2.6)	1.8 (1.2-2.1)	1.5 (1.1-1.7)	1.3 (0.9-1.5)
2	16 (11-26)	12 (7.9-19)	9.1 (5.9-14)	6.8 (4.4-11)	5.2 (3.4-8.0)	4.2 (2.7-6.2)	3.4 (2.2-4.9)	2.8 (1.8-3.9)	2.4 (1.5-3.2)	2.0 (1.3-2.6)	1.7 (1.1-2.3)
3	24 (14-34)	18 (11-26)	14 (8.0-20)	10 (6.0-15)	7.7 (4.6-11)	6.1 (3.6-8.7)	4.9 (3.0-6.9)	4.0 (2.4-5.6)	3.3 (2.0-4.6)	2.7 (1.7-3.8)	2.3 (1.5-3.2)
4	33 (19-43)	26 (15-34)	20 (11-26)	15 (8.3-20)	11 (6.4-15)	8.9 (5.2-12)	7.0 (4.3-9.3)	5.6 (3.6-7.5)	4.5 (3.0-6.1)	3.7 (2.5-5.1)	3.1 (2.2-4.3)
5	44 (26-51)	36 (20-41)	28 (16-33)	21 (12-25)	16 (9.3-20)	13 (7.6-16)	10 (6.2-12)	7.9 (5.2-9.9)	6.3 (4.4-8.0)	5.1 (3.8-6.5)	4.2 (3.2-5.4)
6	56	47	38	30	23	18	14	11	8.9	7.1	5.7

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

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	5.9	4.6	3.6	2.8	2.3	2.0	1.7	1.4	1.2	1.1	0.9
1	8.8 (6.2-15)	6.8 (4.8-11)	5.3 (3.7-8.5)	4.1 (2.8-6.4)	3.4 (2.3-5.0)	2.8 (1.9-4.0)	2.3 (1.6-3.2)	2.0 (1.4-2.6)	1.7 (1.1-2.1)	1.4 (1.0-1.8)	1.2 (0.8-1.5)
2	13 (8.4-20)	10 (6.4-16)	7.8 (5.0-12)	6.0 (3.8-9.3)	4.9 (3.1-7.4)	4.0 (2.5-5.9)	3.3 (2.1-4.8)	2.8 (1.7-3.9)	2.3 (1.5-3.2)	1.9 (1.2-2.6)	1.6 (1.0-2.2)
3	19 (11-27)	15 (8.8-21)	11 (6.7-17)	8.8 (5.2-13)	7.1 (4.2-10)	5.8 (3.4-8.2)	4.7 (2.8-6.7)	3.9 (2.3-5.5)	3.2 (1.9-4.5)	2.7 (1.6-3.8)	2.2 (1.4-3.1)
4	26 (15-34)	21 (12-28)	17 (9.2-22)	13 (7.2-17)	10 (5.8-14)	8.3 (4.8-11)	6.7 (4.0-9.0)	5.5 (3.3-7.3)	4.5 (2.8-6.0)	3.7 (2.3-5.0)	3.0 (2.0-4.2)
5	36 (20-42)	29 (16-35)	23 (13-28)	18 (9.9-22)	15 (8.1-18)	12 (6.8-15)	9.6 (5.6-12)	7.7 (4.7-9.8)	6.3 (4.0-8.0)	5.1 (3.4-6.6)	4.2 (2.9-5.4)
6	46	39	32	26	21	17	14	11	8.8	7.1	5.8

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	4.7	3.8	3.0	2.4	2.1	1.8	1.5	1.3	1.1	0.9	0.8
1	7.0 (4.8-12)	5.6 (3.8-9.2)	4.4 (3.0-7.2)	3.6 (2.4-5.7)	3.0 (2.0-4.7)	2.5 (1.7-3.8)	2.1 (1.4-3.2)	1.8 (1.2-2.6)	1.5 (1.0-2.1)	1.3 (0.9-1.8)	1.1 (0.7-1.5)
2	10 (6.5-16)	8.2 (5.1-13)	6.5 (4.0-10)	5.2 (3.2-8.0)	4.4 (2.7-6.6)	3.6 (2.3-5.5)	3.0 (1.9-4.5)	2.6 (1.6-3.7)	2.1 (1.3-3.1)	1.8 (1.1-2.6)	1.5 (1.0-2.1)
3	15 (8.8-22)	12 (7.0-17)	9.5 (5.5-14)	7.6 (4.4-11)	6.3 (3.7-9.2)	5.3 (3.1-7.6)	4.4 (2.5-6.3)	3.7 (2.1-5.2)	3.0 (1.8-4.3)	2.5 (1.5-3.6)	2.1 (1.3-3.0)
4	21 (12-28)	17 (9.5-23)	14 (7.5-18)	11 (6.1-15)	9.2 (5.1-12)	7.6 (4.2-10)	6.3 (3.5-8.5)	5.2 (3.0-7.1)	4.3 (2.5-5.9)	3.6 (2.1-4.9)	3.0 (1.8-4.1)
5	29 (16-34)	24 (13-29)	19 (10-24)	16 (8.3-19)	13 (7.0-16)	11 (5.9-14)	9.1 (5.0-11)	7.5 (4.2-9.5)	6.2 (3.6-7.9)	5.1 (3.0-6.6)	4.2 (2.6-5.5)
6	38	32	27	22	19	16	13	11	8.9	7.3	6.0