Zimbabwe - 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 body mass index (BMI kg/m²), 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.

 Age = 50 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	0.8	0.8	0.8	0.7	0.6	0.6	0.5
1	1.3 (0.9-2.1)	1.3 (0.9-1.9)	1.3 (0.9-1.9)	1.1 (0.7-1.6)	1.0 (0.6-1.4)	0.8 (0.6-1.2)	0.7 (0.5-1.0)
2	2.1 (1.1-3.7)	2.0 (1.1-3.6)	2.0 (1.1-3.6)	1.7 (0.9-3.1)	1.5 (0.8-2.7)	1.3 (0.7-2.3)	1.1 (0.6-2.0)
3	3.3 (1.7-5.5)	3.1 (1.5-5.5)	3.1 (1.5-5.6)	2.6 (1.3-4.8)	2.3 (1.1-4.2)	1.9 (0.9-3.6)	1.7 (0.8-3.1)
4	5.0 (2.5-8.0)	4.7 (2.4-7.7)	4.6 (2.3-7.6)	3.9 (2.0-6.6)	3.4 (1.7-5.7)	2.9 (1.4-4.9)	2.5 (1.2-4.2)
5	7.6 (4.2-10)	7.1 (4.3-9.7)	6.7 (4.3-9.3)	5.8 (3.7-8.0)	4.9 (3.2-6.9)	4.2 (2.7-5.9)	3.6 (2.3-5.1)
6	11	10	9.8	8.4	7.1	6.1	5.2

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

Age = 55 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.0	0.9	0.9	0.8	0.7	0.6	0.5
1	1.5 (1.0-2.4)	1.5 (1.0-2.1)	1.4 (1.0-2.0)	1.2 (0.8-1.7)	1.1 (0.7-1.5)	0.9 (0.6-1.3)	0.8 (0.5-1.1)
2	2.4 (1.4-4.0)	2.3 (1.3-3.9)	2.2 (1.2-3.8)	1.9 (1.0-3.3)	1.6 (0.9-2.9)	1.4 (0.7-2.5)	1.2 (0.6-2.1)
3	3.8 (2.0-6.0)	3.5 (1.8-5.9)	3.4 (1.7-5.9)	2.9 (1.4-5.1)	2.4 (1.2-4.4)	2.1 (1.0-3.7)	1.8 (0.9-3.2)
4	5.8 (3.2-8.9)	5.3 (2.9-8.5)	5.0 (2.7-8.2)	4.3 (2.2-7.0)	3.6 (1.9-6.0)	3.1 (1.6-5.1)	2.6 (1.3-4.4)
5	8.7 (5.0-12)	7.9 (4.9-11)	7.4 (4.8-10)	6.3 (4.1-8.7)	5.3 (3.5-7.4)	4.5 (2.9-6.3)	3.8 (2.5-5.4)
6	13	12	11	9.1	7.7	6.5	5.5

Age = 60 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.0	1.0	1.0	0.8	0.7	0.6	0.5
1	1.7 (1.1-2.5)	1.6 (1.1-2.3)	1.5 (1.0-2.1)	1.3 (0.9-1.8)	1.1 (0.7-1.5)	0.9 (0.6-1.3)	0.8 (0.5-1.1)
2	2.6 (1.5-4.1)	2.4 (1.4-3.9)	2.3 (1.3-3.9)	2.0 (1.1-3.3)	1.7 (0.9-2.9)	1.4 (0.8-2.5)	1.2 (0.7-2.1)
3	4.0 (2.3-6.1)	3.7 (2.1-5.9)	3.5 (1.9-5.9)	3.0 (1.6-5.0)	2.5 (1.3-4.3)	2.1 (1.1-3.6)	1.8 (0.9-3.1)
4	6.0 (3.5-8.9)	5.5 (3.3-8.5)	5.2 (3.0-8.3)	4.4 (2.5-7.0)	3.7 (2.0-6.0)	3.1 (1.7-5.0)	2.6 (1.4-4.3)
5	8.9 (5.4-12)	8.2 (5.2-11)	7.7 (5.1-11)	6.4 (4.3-8.8)	5.4 (3.6-7.4)	4.5 (3.0-6.3)	3.8 (2.5-5.3)
6	13	12	11	9.3	7.7	6.4	5.4

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

Age = 65 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.1	1.1	1.0	0.9	0.7	0.6	0.5
1	1.7 (1.2-2.5)	1.6 (1.1-2.3)	1.6 (1.1-2.1)	1.3 (0.9-1.8)	1.1 (0.7-1.5)	0.9 (0.6-1.3)	0.8 (0.5-1.1)
2	2.6 (1.7-3.9)	2.5 (1.5-3.8)	2.4 (1.4-3.8)	2.0 (1.1-3.2)	1.7 (1.0-2.8)	1.4 (0.8-2.3)	1.2 (0.7-2.0)
3	4.0 (2.4-5.9)	3.7 (2.2-5.6)	3.6 (2.1-5.7)	2.9 (1.7-4.8)	2.5 (1.4-4.0)	2.0 (1.1-3.4)	1.7 (0.9-2.8)
4	5.9 (3.6-8.5)	5.5 (3.5-8.2)	5.2 (3.2-8.1)	4.3 (2.6-6.8)	3.6 (2.1-5.7)	3.0 (1.7-4.7)	2.5 (1.4-4.0)
5	8.6 (5.7-11)	8.0 (5.4-11)	7.6 (5.3-10)	6.3 (4.3-8.6)	5.2 (3.6-7.2)	4.3 (2.9-6.0)	3.5 (2.4-5.0)
6	12	12	11	9.0	7.4	6.1	5.0

Age = 70 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.2	1.1	1.1	0.9	0.7	0.6	0.5
1	1.8 (1.2-2.3)	1.7 (1.2-2.2)	1.6 (1.1-2.1)	1.3 (0.9-1.7)	1.1 (0.7-1.4)	0.9 (0.6-1.2)	0.7 (0.5-1.0)
2	2.8 (1.7-4.4)	2.6 (1.6-4.0)	2.4 (1.5-3.6)	2.0 (1.2-3.0)	1.6 (1.0-2.4)	1.3 (0.8-2.0)	1.1 (0.7-1.6)
3	4.4 (2.5-7.2)	4.0 (2.3-6.3)	3.6 (2.2-5.5)	2.9 (1.8-4.5)	2.4 (1.4-3.6)	1.9 (1.1-3.0)	1.6 (0.9-2.4)
4	6.9 (4.2-10)	6.2 (3.8-9.2)	5.5 (3.5-8.3)	4.4 (2.7-6.7)	3.5 (2.2-5.4)	2.8 (1.7-4.4)	2.3 (1.4-3.5)
5	11 (8.2-14)	9.4 (7.2-13)	8.4 (6.4-11)	6.7 (5.1-9.1)	5.3 (4.0-7.3)	4.2 (3.2-5.9)	3.4 (2.5-4.7)
6	16	14	13	10.0	7.9	6.3	5.0

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

Age = 75 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.3	1.2	1.2	1.0	0.8	0.7	0.5
1	2.1 (1.4-3.5)	2.0 (1.3-3.0)	1.8 (1.3-2.5)	1.5 (1.0-2.0)	1.2 (0.8-1.6)	1.0 (0.7-1.2)	0.8 (0.5-1.0)
2	3.6 (1.9-6.3)	3.2 (1.8-5.4)	2.9 (1.7-4.5)	2.3 (1.4-3.6)	1.8 (1.1-2.8)	1.5 (0.9-2.3)	1.2 (0.7-1.8)
3	5.9 (2.8-10)	5.2 (2.6-8.8)	4.6 (2.4-7.3)	3.6 (1.9-5.7)	2.8 (1.5-4.5)	2.2 (1.2-3.6)	1.8 (1.0-2.8)
4	9.5 (4.7-15)	8.3 (4.2-13)	7.2 (3.9-11)	5.6 (3.0-8.6)	4.4 (2.4-6.8)	3.5 (1.9-5.3)	2.7 (1.5-4.2)
5	15 (8.3-20)	13 (7.5-18)	11 (6.9-15)	8.8 (5.5-12)	6.9 (4.3-9.6)	5.4 (3.4-7.5)	4.2 (2.7-5.9)
6	22	20	17	14	11	8.3	6.5

Age = 80 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.4	1.4	1.4	1.1	0.9	0.7	0.6
1	2.4 (1.5-4.1)	2.2 (1.4-3.5)	2.1 (1.4-3.0)	1.6 (1.1-2.3)	1.3 (0.9-1.8)	1.1 (0.7-1.4)	0.8 (0.6-1.1)
2	3.9 (2.2-6.8)	3.5 (2.0-5.8)	3.2 (1.9-4.9)	2.5 (1.5-3.8)	2.0 (1.2-3.0)	1.6 (1.0-2.3)	1.3 (0.8-1.8)
3	6.3 (3.2-10)	5.6 (2.9-9.0)	5.0 (2.7-7.7)	3.9 (2.1-6.0)	3.0 (1.7-4.7)	2.4 (1.3-3.7)	1.9 (1.0-2.9)
4	9.9 (5.0-15)	8.7 (4.6-13)	7.7 (4.4-11)	6.0 (3.4-8.8)	4.7 (2.6-6.9)	3.6 (2.1-5.4)	2.8 (1.6-4.2)
5	15 (8.2-20)	13 (7.4-18)	12 (6.9-16)	9.1 (5.4-12)	7.1 (4.3-9.7)	5.5 (3.3-7.6)	4.3 (2.6-5.9)
6	22	20	17	14	11	8.4	6.5

FRAX ® WHO Fracture Risk Assessment Tool

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

Age = 85 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.6	1.5	1.5	1.2	1.0	0.8	0.6
1	2.7 (1.7-4.6)	2.4 (1.6-4.0)	2.3 (1.5-3.5)	1.8 (1.2-2.7)	1.5 (1.0-2.1)	1.1 (0.8-1.6)	0.9 (0.6-1.3)
2	4.4 (2.4-7.7)	3.9 (2.2-6.7)	3.6 (2.1-5.7)	2.8 (1.7-4.4)	2.2 (1.3-3.4)	1.7 (1.0-2.7)	1.4 (0.8-2.1)
3	7.0 (3.6-12)	6.2 (3.2-10)	5.6 (3.0-8.9)	4.4 (2.3-7.0)	3.4 (1.8-5.4)	2.7 (1.4-4.2)	2.1 (1.1-3.3)
4	11 (5.5-16)	9.7 (5.0-14)	8.7 (4.8-13)	6.7 (3.7-9.9)	5.2 (2.9-7.7)	4.1 (2.3-6.0)	3.1 (1.7-4.7)
5	17 (9.1-22)	15 (8.2-20)	13 (7.6-18)	10 (5.9-14)	8.0 (4.6-11)	6.2 (3.6-8.5)	4.8 (2.8-6.6)
6	24	22	19	15	12	9.3	7.2

Age = 90 years

Number of CRFs	BMI kg/m²						
	15	20	25	30	35	40	45
0	1.8	1.7	1.7	1.3	1.0	0.8	0.7
1	3.1 (2.0-5.4)	2.8 (1.8-4.7)	2.6 (1.7-4.1)	2.0 (1.3-3.1)	1.6 (1.1-2.4)	1.3 (0.8-1.9)	1.0 (0.7-1.4)
2	5.1 (2.8-9.0)	4.5 (2.5-7.8)	4.1 (2.4-6.7)	3.2 (1.8-5.2)	2.5 (1.4-4.0)	1.9 (1.1-3.1)	1.5 (0.9-2.4)
3	8.1 (4.1-13)	7.2 (3.7-12)	6.5 (3.4-10)	5.0 (2.6-8.1)	3.9 (2.0-6.3)	3.0 (1.6-4.9)	2.3 (1.2-3.8)
4	13 (6.3-19)	11 (5.7-17)	9.9 (5.3-15)	7.7 (4.2-11)	6.0 (3.2-8.9)	4.6 (2.5-6.9)	3.6 (1.9-5.4)
5	19 (10-25)	17 (9.3-22)	15 (8.6-20)	12 (6.7-16)	9.2 (5.2-12)	7.1 (4.0-9.7)	5.5 (3.1-7.6)
6	27	24	22	17	14	11	8.3