Japan - 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 Japan. 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	2.4	2.3	2.3	2.0	1.8	1.6	1.4
1	3.7 (2.5-5.2)	3.6 (2.4-5.0)	3.6 (2.4-4.8)	3.1 (2.1-4.2)	2.7 (1.8-3.7)	2.4 (1.6-3.3)	2.1 (1.4-2.8)
2	5.7 (3.0-9.8)	5.5 (2.9-9.6)	5.4 (2.9-9.5)	4.8 (2.5-8.4)	4.2 (2.2-7.4)	3.7 (1.9-6.5)	3.2 (1.7-5.7)
3	8.7 (4.2-15)	8.3 (4.0-15)	8.1 (3.9-15)	7.1 (3.4-13)	6.2 (2.9-12)	5.5 (2.6-10)	4.8 (2.2-9.0)
4	13 (6.9-21)	12 (6.4-20)	12 (6.2-20)	10 (5.4-17)	9.1 (4.7-15)	8.0 (4.1-13)	7.0 (3.6-12)
5	19 (12-25)	18 (12-24)	17 (12-23)	15 (10-20)	13 (9.2-18)	12 (8.0-16)	10 (7.0-14)
6	27	25	24	21	19	16	14

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

Age = 55 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	3.0	2.9	2.9	2.6	2.3	2.0	1.7
1	4.6 (3.1-6.4)	4.5 (3.0-6.1)	4.5 (3.0-6.0)	3.9 (2.6-5.3)	3.4 (2.3-4.6)	3.0 (2.0-4.0)	2.6 (1.8-3.5)
2	7.1 (3.9-12)	6.9 (3.7-12)	6.8 (3.6-12)	5.9 (3.2-10)	5.2 (2.8-9.1)	4.5 (2.4-8.0)	4.0 (2.1-7.0)
3	11 (5.5-18)	10 (5.1-18)	10 (4.9-18)	8.8 (4.3-16)	7.7 (3.7-14)	6.7 (3.2-12)	5.9 (2.8-11)
4	16 (8.8-24)	15 (8.2-24)	15 (7.8-24)	13 (6.8-21)	11 (5.9-18)	9.8 (5.1-16)	8.6 (4.4-14)
5	23 (15-30)	21 (15-28)	21 (15-28)	18 (13-25)	16 (11-22)	14 (9.9-19)	12 (8.7-17)
6	32	30	29	25	22	20	17

Age = 60 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	3.6	3.5	3.4	3.0	2.6	2.3	2.0
1	5.6 (3.8-7.6)	5.3 (3.6-7.1)	5.2 (3.6-6.9)	4.6 (3.1-6.0)	4.0 (2.7-5.2)	3.5 (2.3-4.5)	3.0 (2.0-4.0)
2	8.5 (4.9-14)	8.1 (4.5-13)	7.9 (4.3-13)	6.8 (3.7-12)	6.0 (3.2-10)	5.2 (2.8-8.9)	4.5 (2.4-7.8)
3	13 (7.1-20)	12 (6.4-20)	12 (6.0-20)	10 (5.1-18)	8.8 (4.4-16)	7.6 (3.8-14)	6.6 (3.3-12)
4	18 (11-28)	17 (10-27)	17 (9.5-26)	15 (8.1-23)	13 (7.0-20)	11 (6.0-18)	9.6 (5.2-16)
5	26 (18-34)	25 (18-32)	24 (17-31)	21 (15-28)	18 (13-24)	16 (11-21)	14 (9.9-19)
6	36	34	32	29	25	22	19

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

Age = 65 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	4.5	4.3	4.3	3.7	3.2	2.8	2.4
1	6.9 (4.8-9.2)	6.5 (4.5-8.6)	6.4 (4.4-8.3)	5.5 (3.8-7.2)	4.8 (3.3-6.2)	4.1 (2.8-5.4)	3.6 (2.4-4.7)
2	10 (6.3-16)	9.8 (5.8-15)	9.5 (5.4-15)	8.2 (4.7-14)	7.1 (4.0-12)	6.1 (3.4-10)	5.3 (2.9-9.0)
3	15 (9.5-23)	14 (8.4-23)	14 (7.6-23)	12 (6.5-20)	10 (5.5-18)	8.9 (4.7-15)	7.7 (4.1-13)
4	22 (15-31)	20 (13-30)	20 (12-30)	17 (10-26)	15 (8.6-23)	13 (7.3-20)	11 (6.2-18)
5	30 (22-38)	28 (21-36)	27 (21-36)	24 (18-31)	21 (15-28)	18 (13-24)	16 (11-21)
6	40	38	37	32	28	25	21

Age = 70 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	5.9	5.5	5.3	4.5	3.9	3.3	2.9
1	8.8 (6.4-11)	8.1 (5.9-10)	7.7 (5.6-10)	6.5 (4.7-8.5)	5.6 (4.0-7.3)	4.8 (3.4-6.3)	4.1 (2.9-5.4)
2	13 (8.6-19)	12 (7.7-17)	11 (7.0-16)	9.4 (5.9-13)	8.0 (5.0-11)	6.8 (4.2-9.8)	5.8 (3.6-8.4)
3	19 (13-28)	17 (11-25)	16 (10-24)	13 (8.5-20)	11 (7.1-17)	9.7 (6.0-15)	8.2 (5.1-13)
4	28 (19-38)	25 (17-35)	23 (16-32)	19 (13-28)	16 (11-24)	14 (9.1-20)	12 (7.6-17)
5	38 (32-47)	35 (29-44)	32 (26-40)	27 (21-34)	23 (18-30)	19 (15-25)	16 (13-22)
6	50	47	43	37	32	27	23

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

Age = 75 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	7.8	7.3	7.0	5.9	5.0	4.2	3.6
1	12 (8.4-18)	11 (7.8-15)	10 (7.4-12)	8.5 (6.1-11)	7.1 (5.1-9.0)	6.0 (4.3-7.6)	5.0 (3.6-6.5)
2	19 (11-29)	17 (10-25)	15 (9.5-21)	12 (7.9-17)	10 (6.5-14)	8.6 (5.4-12)	7.1 (4.5-9.8)
3	27 (16-41)	25 (15-36)	22 (14-31)	18 (12-26)	15 (9.5-21)	12 (7.8-18)	10 (6.5-15)
4	38 (24-51)	35 (22-47)	31 (21-43)	26 (17-37)	22 (14-31)	18 (11-26)	15 (9.4-21)
5	51 (37-60)	47 (35-57)	43 (33-53)	37 (28-46)	31 (23-39)	26 (20-33)	21 (16-28)
6	63	60	56	49	43	36	30

Age = 80 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	10	9.7	9.4	7.9	6.6	5.5	4.6
1	16 (11-23)	14 (10-20)	14 (9.8-17)	11 (8.1-14)	9.4 (6.7-11)	7.8 (5.5-9.4)	6.5 (4.6-7.9)
2	23 (15-34)	21 (14-30)	19 (13-26)	16 (11-22)	13 (8.7-18)	11 (7.1-15)	9.1 (5.9-12)
3	33 (20-46)	30 (19-42)	27 (18-37)	23 (15-31)	19 (12-26)	16 (9.9-22)	13 (8.1-18)
4	44 (29-55)	41 (28-52)	38 (26-49)	32 (22-42)	27 (18-36)	22 (15-30)	18 (12-25)
5	55 (41-64)	52 (39-61)	49 (37-58)	42 (32-51)	36 (27-45)	30 (23-38)	25 (19-32)
6	66	64	61	54	47	41	34

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

Age = 85 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	11	10	9.7	8.0	6.6	5.5	4.5
1	17 (12-26)	16 (11-23)	14 (10-20)	12 (8.4-16)	9.7 (6.8-13)	8.0 (5.6-10)	6.5 (4.6-8.3)
2	25 (16-38)	23 (15-34)	21 (14-29)	17 (11-24)	14 (9.0-20)	12 (7.3-16)	9.4 (6.0-13)
3	35 (22-49)	32 (20-45)	30 (19-41)	25 (16-35)	20 (13-29)	17 (10-24)	14 (8.3-20)
4	47 (32-59)	43 (29-55)	40 (28-52)	34 (23-45)	29 (19-38)	24 (15-32)	19 (12-27)
5	58 (44-66)	55 (41-64)	52 (39-61)	45 (33-54)	39 (28-48)	33 (23-41)	27 (19-35)
6	67	66	63	57	50	44	37

Age = 90 years

Number of CRFs	BMI (kg/m²)						
	15	**20**	**25**	**30**	**35**	**40**	**45**
0	10	8.9	8.0	6.4	5.1	4.1	3.3
1	16 (11-26)	14 (9.9-23)	12 (8.8-19)	10 (6.9-15)	8.0 (5.5-12)	6.4 (4.4-9.4)	5.1 (3.5-7.4)
2	25 (16-39)	22 (14-34)	19 (12-29)	15 (9.6-23)	12 (7.6-19)	9.8 (6.0-15)	7.8 (4.8-12)
3	35 (22-49)	32 (20-45)	28 (17-40)	23 (14-33)	19 (11-27)	15 (8.6-22)	12 (6.8-18)
4	47 (31-59)	43 (28-55)	39 (25-51)	33 (21-44)	27 (17-37)	22 (13-31)	18 (11-25)
5	57 (43-65)	55 (40-63)	51 (36-60)	44 (30-53)	38 (25-46)	32 (20-40)	26 (16-33)
6	64	65	63	57	50	43	36