

Japan - The probabilities of a hip fracture in women

The following tables give the 10-year probability (%) of a hip 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/m ²)						
	15	20	25	30	35	40	45
0	0.4	0.2	0.1	0.1	0.1	0.1	0.0
1	0.8 (0.5-1.6)	0.4 (0.3-0.9)	0.2 (0.2-0.5)	0.2 (0.1-0.4)	0.1 (0.1-0.3)	0.1 (0.1-0.2)	0.1 (0.1-0.2)
2	1.6 (0.8-3.5)	0.9 (0.4-1.9)	0.5 (0.2-1.0)	0.4 (0.2-0.8)	0.3 (0.1-0.6)	0.2 (0.1-0.5)	0.2 (0.1-0.4)
3	3.1 (1.2-6.0)	1.7 (0.7-3.3)	0.9 (0.4-1.8)	0.7 (0.3-1.4)	0.5 (0.2-1.1)	0.4 (0.2-0.8)	0.3 (0.1-0.7)
4	5.6 (2.2-9.1)	3.1 (1.2-5.0)	1.7 (0.6-2.7)	1.3 (0.5-2.1)	1.0 (0.4-1.6)	0.8 (0.3-1.3)	0.6 (0.2-1.0)
5	10 (4.6-13)	5.5 (2.5-7.4)	3.0 (1.4-4.1)	2.3 (1.1-3.2)	1.8 (0.8-2.5)	1.4 (0.6-1.9)	1.1 (0.5-1.5)
6	17	9.6	5.3	4.1	3.2	2.5	2.0

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

Age = 55 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	0.7	0.4	0.2	0.2	0.1	0.1	0.1
1	1.4 (0.9-2.4)	0.7 (0.5-1.3)	0.4 (0.3-0.7)	0.3 (0.2-0.5)	0.2 (0.2-0.4)	0.2 (0.1-0.3)	0.1 (0.1-0.3)
2	2.6 (1.4-5.1)	1.4 (0.8-2.8)	0.8 (0.4-1.5)	0.6 (0.3-1.2)	0.5 (0.2-0.9)	0.4 (0.2-0.7)	0.3 (0.2-0.5)
3	4.7 (2.1-8.8)	2.6 (1.2-4.8)	1.4 (0.6-2.6)	1.1 (0.5-2.0)	0.8 (0.4-1.6)	0.7 (0.3-1.2)	0.5 (0.2-1.0)
4	8.4 (3.7-13)	4.6 (2.0-7.3)	2.5 (1.1-4.0)	2.0 (0.9-3.1)	1.5 (0.7-2.4)	1.2 (0.5-1.9)	0.9 (0.4-1.5)
5	14 (7.8-19)	8.1 (4.3-11)	4.5 (2.3-6.0)	3.5 (1.8-4.7)	2.7 (1.4-3.6)	2.1 (1.1-2.8)	1.6 (0.9-2.2)
6	24	14	7.8	6.1	4.7	3.7	2.9

Age = 60 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	1.4	0.8	0.4	0.3	0.3	0.2	0.2
1	2.7 (1.9-4.2)	1.5 (1.0-2.3)	0.8 (0.6-1.2)	0.6 (0.4-1.0)	0.5 (0.3-0.7)	0.4 (0.3-0.6)	0.3 (0.2-0.5)
2	4.8 (2.8-8.6)	2.6 (1.5-4.8)	1.4 (0.8-2.6)	1.1 (0.7-2.0)	0.9 (0.5-1.6)	0.7 (0.4-1.2)	0.5 (0.3-1.0)
3	8.4 (4.3-15)	4.7 (2.4-8.3)	2.6 (1.3-4.6)	2.0 (1.0-3.6)	1.6 (0.8-2.8)	1.2 (0.6-2.2)	0.9 (0.5-1.7)
4	14 (7.4-22)	8.2 (4.1-12)	4.5 (2.3-7.0)	3.5 (1.8-5.4)	2.8 (1.4-4.2)	2.1 (1.1-3.3)	1.7 (0.8-2.6)
5	24 (15-30)	14 (8.6-18)	7.8 (4.8-10)	6.1 (3.7-8.0)	4.8 (2.9-6.3)	3.7 (2.2-4.9)	2.9 (1.7-3.8)
6	37	23	13	10	8.2	6.4	5.0

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

Age = 65 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	2.9	1.6	0.9	0.7	0.5	0.4	0.3
1	5.0 (3.7-7.0)	2.8 (2.1-3.9)	1.5 (1.1-2.1)	1.2 (0.9-1.7)	0.9 (0.7-1.3)	0.7 (0.5-1.0)	0.6 (0.4-0.8)
2	8.6 (5.5-14)	4.9 (3.1-8.0)	2.7 (1.7-4.5)	2.1 (1.3-3.5)	1.6 (1.0-2.7)	1.3 (0.8-2.1)	1.0 (0.6-1.6)
3	14 (8.2-23)	8.3 (4.6-14)	4.7 (2.6-7.8)	3.6 (2.0-6.1)	2.8 (1.5-4.8)	2.2 (1.2-3.7)	1.7 (0.9-2.9)
4	23 (14-33)	14 (8.1-20)	7.9 (4.5-12)	6.2 (3.5-9.2)	4.9 (2.7-7.2)	3.8 (2.1-5.6)	2.9 (1.6-4.4)
5	36 (27-44)	23 (16-28)	13 (9.3-17)	10 (7.3-13)	8.2 (5.7-10)	6.4 (4.4-8.2)	5.0 (3.4-6.4)
6	53	35	22	17	14	11	8.4

Age = 70 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	5.8	3.3	1.8	1.4	1.1	0.9	0.7
1	10 (8.3-12)	6.0 (4.8-7.0)	3.4 (2.7-3.9)	2.6 (2.1-3.0)	2.0 (1.6-2.4)	1.6 (1.3-1.8)	1.2 (1.0-1.4)
2	18 (12-24)	11 (7.3-14)	6.2 (4.1-8.1)	4.8 (3.2-6.4)	3.7 (2.5-5.0)	2.9 (1.9-3.9)	2.3 (1.5-3.0)
3	30 (21-41)	19 (12-27)	11 (7.2-16)	8.7 (5.6-13)	6.8 (4.4-10)	5.3 (3.4-7.9)	4.1 (2.6-6.2)
4	46 (36-59)	31 (24-42)	19 (14-27)	15 (11-22)	12 (8.8-17)	9.5 (6.9-14)	7.4 (5.4-11)
5	64 (59-72)	48 (43-56)	32 (28-38)	26 (22-31)	21 (18-25)	16 (14-20)	13 (11-16)
6	79	67	50	41	34	28	22

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

Age = 75 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	11	6.7	3.9	3.0	2.3	1.8	1.4
1	21 (15-33)	13 (9.5-21)	7.6 (5.6-13)	5.9 (4.4-10)	4.6 (3.4-7.9)	3.6 (2.6-6.2)	2.8 (2.0-4.8)
2	35 (22-52)	23 (14-38)	14 (8.4-24)	11 (6.6-20)	8.9 (5.1-15)	6.9 (4.0-12)	5.4 (3.1-9.5)
3	52 (35-69)	39 (23-56)	25 (14-40)	20 (11-32)	16 (8.9-26)	13 (6.9-21)	10 (5.4-17)
4	69 (52-81)	57 (38-73)	42 (25-58)	35 (20-49)	28 (16-41)	23 (12-34)	18 (9.6-27)
5	81 (69-86)	75 (58-82)	62 (43-71)	54 (35-63)	45 (28-54)	38 (23-46)	31 (18-38)
6	87	86	80	73	65	57	49

Age = 80 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	17	11	6.7	5.2	4.0	3.1	2.4
1	29 (22-46)	20 (15-33)	13 (9.4-21)	9.8 (7.3-17)	7.7 (5.7-13)	6.0 (4.4-10)	4.6 (3.4-8.2)
2	44 (31-63)	33 (22-51)	22 (14-37)	18 (11-30)	14 (8.6-24)	11 (6.7-19)	8.6 (5.2-15)
3	60 (43-75)	49 (31-67)	36 (21-54)	30 (16-46)	24 (13-38)	19 (10-31)	15 (7.9-25)
4	72 (57-82)	66 (47-78)	54 (33-68)	46 (27-60)	38 (22-52)	31 (17-43)	26 (13-36)
5	81 (71-86)	78 (64-84)	71 (52-79)	64 (44-72)	56 (37-65)	48 (30-56)	40 (24-48)
6	86	86	83	79	72	65	57

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

Age = 85 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	21	15	9.7	7.5	5.8	4.5	3.5
1	34 (26-52)	26 (19-41)	17 (13-29)	14 (10-24)	11 (7.9-19)	8.4 (6.1-15)	6.5 (4.7-12)
2	48 (36-66)	40 (27-58)	29 (19-46)	24 (15-38)	19 (12-31)	15 (9.2-25)	12 (7.1-20)
3	62 (47-75)	55 (38-71)	45 (28-63)	37 (22-55)	31 (18-47)	25 (14-39)	20 (11-32)
4	73 (58-82)	68 (52-79)	61 (42-74)	53 (35-67)	46 (28-60)	39 (23-52)	32 (18-44)
5	80 (71-84)	78 (66-84)	75 (59-82)	69 (51-77)	62 (43-71)	54 (36-64)	47 (29-56)
6	82	84	84	80	75	69	62

Age = 90 years

Number of CRFs	BMI (kg/m ²)						
	15	20	25	30	35	40	45
0	22	16	11	8.5	6.6	5.1	3.9
1	34 (26-51)	27 (20-43)	19 (14-32)	15 (11-26)	12 (8.7-21)	9.3 (6.7-16)	7.2 (5.1-13)
2	47 (35-65)	40 (28-58)	31 (21-48)	26 (16-40)	20 (13-33)	16 (9.9-27)	13 (7.7-21)
3	60 (46-74)	55 (39-69)	46 (30-63)	39 (24-56)	32 (19-48)	26 (15-40)	21 (12-33)
4	71 (57-80)	67 (51-77)	61 (43-73)	54 (36-67)	47 (29-60)	39 (24-52)	33 (19-44)
5	76 (69-80)	76 (65-81)	74 (59-80)	68 (51-76)	61 (44-70)	54 (36-63)	47 (30-56)
6	77	81	82	78	74	68	61