

Japan - The probabilities of a hip fracture in men

The following tables give the 10-year probability (%) of a hip 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 Japan. 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 | 9.3 | 5.0 | 2.6 | 1.4 | 0.7 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 |
| 1 | 15 (9.8-19) | 7.9 (5.3-10) | 4.2 (2.8-5.6) | 2.2 (1.5-3.0) | 1.2 (0.8-1.6) | 0.6 (0.4-0.8) | 0.3 (0.2-0.4) | 0.2 (0.1-0.2) | 0.1 (0.1-0.1) | 0.0 (0.0-0.1) | 0.0 (0.0-0.0) |
| 2 | 22 (14-32) | 12 (7.4-18) | 6.7 (3.9-10) | 3.6 (2.1-5.4) | 1.9 (1.1-2.9) | 1.0 (0.6-1.5) | 0.5 (0.3-0.8) | 0.3 (0.2-0.4) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) | 0.0 (0.0-0.1) |
| 3 | 32 (20-47) | 19 (11-29) | 10 (5.9-17) | 5.6 (3.2-9.0) | 3.0 (1.7-4.8) | 1.6 (0.9-2.6) | 0.8 (0.5-1.4) | 0.4 (0.2-0.7) | 0.2 (0.1-0.4) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) |
| 4 | 45 (32-62) | 28 (18-40) | 16 (10-24) | 8.6 (5.3-13) | 4.6 (2.8-7.3) | 2.4 (1.5-3.9) | 1.3 (0.8-2.1) | 0.7 (0.4-1.1) | 0.4 (0.2-0.6) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) |
| 5 | 60 (50-73) | 39 (31-52) | 23 (18-32) | 13 (9.6-19) | 7.1 (5.2-10) | 3.8 (2.7-5.5) | 2.0 (1.4-2.9) | 1.1 (0.8-1.5) | 0.6 (0.4-0.8) | 0.3 (0.2-0.4) | 0.2 (0.1-0.2) |
| 6 | 75 | 53 | 34 | 19 | 11 | 5.8 | 3.1 | 1.6 | 0.9 | 0.5 | 0.3 |

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

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 | 9.2 | 5.1 | 2.8 | 1.6 | 0.8 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 |
| 1 | 14 (9.7-17) | 8.0 (5.4-9.9) | 4.4 (3.0-5.5) | 2.4 (1.6-3.0) | 1.3 (0.9-1.7) | 0.7 (0.5-0.9) | 0.4 (0.3-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) | 0.0 (0.0-0.1) |
| 2 | 21 (13-29) | 12 (7.6-17) | 6.9 (4.2-9.9) | 3.8 (2.3-5.5) | 2.1 (1.3-3.0) | 1.1 (0.7-1.7) | 0.6 (0.4-0.9) | 0.3 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) |
| 3 | 30 (20-43) | 18 (11-27) | 10 (6.3-16) | 5.9 (3.5-9.1) | 3.2 (1.9-5.1) | 1.8 (1.1-2.8) | 1.0 (0.6-1.5) | 0.5 (0.3-0.8) | 0.3 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) |
| 4 | 42 (31-57) | 26 (18-38) | 16 (10-23) | 8.9 (5.9-13) | 5.0 (3.2-7.6) | 2.7 (1.8-4.2) | 1.5 (1.0-2.3) | 0.8 (0.5-1.3) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) | 0.1 (0.1-0.2) |
| 5 | 56 (48-68) | 37 (30-48) | 23 (18-31) | 13 (10-19) | 7.5 (5.8-11) | 4.2 (3.2-6.0) | 2.3 (1.8-3.3) | 1.3 (1.0-1.8) | 0.7 (0.5-1.0) | 0.4 (0.3-0.6) | 0.2 (0.2-0.3) |
| 6 | 70 | 50 | 32 | 19 | 11 | 6.3 | 3.5 | 1.9 | 1.1 | 0.6 | 0.3 |

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 | 9.6 | 5.7 | 3.3 | 1.9 | 1.1 | 0.7 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 |
| 1 | 14 (10-17) | 8.6 (6.0-10) | 5.1 (3.5-6.0) | 3.0 (2.0-3.5) | 1.7 (1.2-2.0) | 1.0 (0.7-1.2) | 0.6 (0.4-0.7) | 0.3 (0.2-0.4) | 0.2 (0.1-0.2) | 0.1 (0.1-0.1) | 0.1 (0.1-0.1) |
| 2 | 21 (14-28) | 13 (8.3-17) | 7.7 (4.9-10) | 4.5 (2.9-6.2) | 2.7 (1.7-3.7) | 1.5 (1.0-2.1) | 0.9 (0.6-1.2) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) |
| 3 | 30 (20-40) | 19 (12-26) | 11 (7.4-16) | 6.8 (4.4-10) | 4.0 (2.5-5.9) | 2.4 (1.5-3.5) | 1.4 (0.9-2.0) | 0.8 (0.5-1.2) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) | 0.2 (0.1-0.3) |
| 4 | 40 (31-52) | 27 (20-37) | 17 (12-24) | 10 (7.1-15) | 6.0 (4.2-8.9) | 3.5 (2.5-5.3) | 2.1 (1.4-3.1) | 1.2 (0.8-1.8) | 0.7 (0.5-1.1) | 0.4 (0.3-0.7) | 0.3 (0.2-0.4) |
| 5 | 52 (46-63) | 36 (31-47) | 24 (20-32) | 15 (12-20) | 8.9 (7.4-12) | 5.3 (4.4-7.4) | 3.1 (2.6-4.4) | 1.8 (1.5-2.6) | 1.1 (0.9-1.6) | 0.7 (0.5-0.9) | 0.4 (0.3-0.6) |
| 6 | 65 | 48 | 33 | 21 | 13 | 7.8 | 4.6 | 2.7 | 1.6 | 1.0 | 0.6 |

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

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 | 10 | 6.3 | 3.9 | 2.4 | 1.5 | 0.9 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 |
| 1 | 15 (10-17) | 9.3 (6.6-11) | 5.8 (4.1-6.8) | 3.6 (2.5-4.2) | 2.2 (1.6-2.6) | 1.4 (1.0-1.6) | 0.9 (0.6-1.0) | 0.5 (0.4-0.6) | 0.3 (0.2-0.4) | 0.2 (0.2-0.3) | 0.1 (0.1-0.2) |
| 2 | 21 (14-26) | 13 (9.2-17) | 8.6 (5.8-11) | 5.4 (3.6-7.0) | 3.3 (2.2-4.4) | 2.1 (1.4-2.7) | 1.3 (0.8-1.7) | 0.8 (0.5-1.0) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) | 0.2 (0.1-0.3) |
| 3 | 29 (21-37) | 19 (14-25) | 12 (8.6-17) | 7.9 (5.4-11) | 5.0 (3.4-6.9) | 3.1 (2.1-4.3) | 1.9 (1.3-2.7) | 1.2 (0.8-1.7) | 0.8 (0.5-1.1) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) |
| 4 | 38 (31-48) | 27 (21-35) | 18 (14-24) | 11 (8.6-16) | 7.2 (5.4-10) | 4.5 (3.4-6.5) | 2.8 (2.1-4.1) | 1.8 (1.3-2.6) | 1.1 (0.8-1.6) | 0.7 (0.5-1.0) | 0.5 (0.3-0.7) |
| 5 | 49 (45-59) | 36 (32-45) | 25 (21-32) | 16 (14-22) | 10 (8.9-14) | 6.6 (5.6-9.1) | 4.1 (3.5-5.7) | 2.6 (2.2-3.6) | 1.7 (1.4-2.3) | 1.1 (0.9-1.5) | 0.7 (0.6-0.9) |
| 6 | 60 | 46 | 33 | 23 | 15 | 9.5 | 6.0 | 3.8 | 2.4 | 1.6 | 1.0 |

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 | 11 | 7.3 | 4.8 | 3.2 | 2.1 | 1.4 | 0.9 | 0.6 | 0.4 | 0.3 | 0.2 |
| 1 | 17 (15-21) | 12 (10-15) | 7.8 (6.8-10) | 5.2 (4.5-6.7) | 3.4 (2.9-4.4) | 2.2 (1.9-2.9) | 1.5 (1.3-1.9) | 1.0 (0.8-1.3) | 0.7 (0.6-0.9) | 0.4 (0.4-0.6) | 0.3 (0.3-0.4) |
| 2 | 26 (22-32) | 18 (15-23) | 12 (10-16) | 8.3 (6.7-11) | 5.5 (4.5-7.4) | 3.7 (2.9-4.9) | 2.4 (1.9-3.2) | 1.6 (1.3-2.2) | 1.1 (0.9-1.5) | 0.7 (0.6-1.0) | 0.5 (0.4-0.7) |
| 3 | 37 (30-44) | 27 (22-33) | 19 (15-24) | 13 (10-16) | 8.8 (6.8-11) | 5.9 (4.5-7.5) | 3.9 (3.0-5.0) | 2.6 (2.0-3.3) | 1.8 (1.3-2.3) | 1.2 (0.9-1.5) | 0.8 (0.6-1.1) |
| 4 | 49 (41-55) | 38 (31-44) | 28 (22-33) | 20 (15-24) | 14 (10-16) | 9.4 (6.9-11) | 6.3 (4.6-7.5) | 4.2 (3.1-5.1) | 2.9 (2.1-3.5) | 2.0 (1.4-2.4) | 1.3 (1.0-1.6) |
| 5 | 61 (53-65) | 51 (43-54) | 39 (32-43) | 29 (23-32) | 21 (16-23) | 15 (11-16) | 9.9 (7.6-11) | 6.8 (5.2-7.7) | 4.6 (3.5-5.3) | 3.2 (2.4-3.6) | 2.2 (1.6-2.5) |
| 6 | 71 | 62 | 52 | 41 | 31 | 22 | 15 | 11 | 7.4 | 5.1 | 3.5 |

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

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 | 12 | 8.5 | 6.0 | 4.2 | 2.9 | 2.0 | 1.4 | 1.0 | 0.7 | 0.5 | 0.4 |
| 1 | 21 (16-39) | 15 (12-30) | 11 (8.3-23) | 7.9 (5.9-17) | 5.6 (4.1-12) | 3.9 (2.9-8.5) | 2.7 (2.0-5.9) | 2.0 (1.4-4.3) | 1.4 (1.0-3.1) | 1.0 (0.7-2.2) | 0.7 (0.5-1.6) |
| 2 | 32 (22-51) | 25 (16-41) | 19 (12-33) | 14 (8.2-25) | 10 (5.8-18) | 7.1 (4.1-13) | 5.0 (2.8-9.6) | 3.6 (2.0-7.0) | 2.6 (1.4-5.1) | 1.9 (1.0-3.6) | 1.3 (0.7-2.6) |
| 3 | 45 (29-61) | 37 (22-53) | 29 (16-43) | 22 (12-34) | 17 (8.5-26) | 12 (6.0-19) | 8.7 (4.2-14) | 6.3 (3.0-10) | 4.6 (2.2-7.6) | 3.3 (1.6-5.5) | 2.4 (1.1-4.0) |
| 4 | 58 (39-69) | 50 (31-61) | 42 (23-53) | 33 (17-43) | 26 (12-34) | 20 (8.9-26) | 14 (6.3-19) | 11 (4.6-15) | 7.8 (3.3-11) | 5.7 (2.4-8.0) | 4.1 (1.7-5.8) |
| 5 | 70 (49-75) | 63 (41-69) | 55 (32-61) | 46 (25-53) | 38 (19-43) | 30 (14-34) | 23 (9.8-26) | 17 (7.2-20) | 13 (5.3-15) | 9.5 (3.8-11) | 7.0 (2.8-8.2) |
| 6 | 79 | 74 | 67 | 60 | 51 | 42 | 33 | 26 | 20 | 15 | 11 |

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 | 11 | 8.5 | 6.3 | 4.7 | 3.4 | 2.5 | 1.9 | 1.4 | 1.1 | 0.8 | 0.6 |
| 1 | 19 (14-37) | 15 (11-30) | 11 (8.2-24) | 8.6 (6.1-18) | 6.4 (4.5-14) | 4.8 (3.3-10) | 3.6 (2.5-7.8) | 2.7 (1.9-6.0) | 2.1 (1.4-4.5) | 1.6 (1.1-3.4) | 1.2 (0.8-2.6) |
| 2 | 29 (19-48) | 24 (15-40) | 19 (11-33) | 14 (8.5-26) | 11 (6.3-20) | 8.4 (4.7-16) | 6.3 (3.5-12) | 4.8 (2.6-9.3) | 3.7 (2.0-7.2) | 2.8 (1.5-5.5) | 2.1 (1.1-4.2) |
| 3 | 41 (25-58) | 35 (20-50) | 28 (15-43) | 23 (12-35) | 18 (8.8-28) | 14 (6.6-22) | 11 (5.0-17) | 8.2 (3.8-14) | 6.3 (2.9-11) | 4.8 (2.2-8.2) | 3.7 (1.7-6.3) |
| 4 | 54 (34-66) | 47 (27-59) | 40 (22-52) | 33 (17-44) | 27 (13-36) | 21 (9.8-29) | 17 (7.4-23) | 13 (5.7-19) | 10 (4.4-15) | 8.0 (3.3-11) | 6.2 (2.5-8.8) |
| 5 | 65 (44-71) | 59 (36-65) | 52 (30-58) | 45 (24-51) | 38 (19-44) | 31 (14-36) | 25 (11-30) | 20 (8.6-24) | 16 (6.7-19) | 13 (5.1-15) | 9.9 (3.9-12) |
| 6 | 75 | 70 | 64 | 58 | 50 | 43 | 36 | 30 | 24 | 20 | 15 |

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

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 | 9.2 | 7.2 | 5.7 | 4.4 | 3.5 | 2.7 | 2.1 | 1.7 | 1.3 | 1.1 | 0.8 |
| 1 | 16 (12-31) | 13 (9.4-26) | 10 (7.4-21) | 8.1 (5.8-17) | 6.4 (4.5-14) | 5.0 (3.5-11) | 4.0 (2.8-8.7) | 3.2 (2.2-7.0) | 2.5 (1.8-5.7) | 2.0 (1.4-4.5) | 1.6 (1.1-3.6) |
| 2 | 24 (15-41) | 20 (12-35) | 17 (9.8-29) | 13 (7.7-24) | 11 (6.1-20) | 8.6 (4.8-16) | 6.9 (3.8-13) | 5.6 (3.0-10) | 4.5 (2.4-8.5) | 3.6 (2.0-6.9) | 2.9 (1.6-5.6) |
| 3 | 35 (21-51) | 30 (17-45) | 25 (13-38) | 21 (11-33) | 17 (8.5-27) | 14 (6.7-22) | 11 (5.3-18) | 9.2 (4.3-15) | 7.5 (3.4-13) | 6.1 (2.8-10) | 4.9 (2.2-8.3) |
| 4 | 47 (28-59) | 41 (23-53) | 36 (19-47) | 30 (15-41) | 26 (12-35) | 21 (9.7-29) | 18 (7.8-24) | 15 (6.3-20) | 12 (5.1-17) | 9.8 (4.1-14) | 8.0 (3.3-11) |
| 5 | 59 (37-65) | 53 (31-60) | 48 (26-54) | 42 (21-48) | 36 (17-41) | 31 (14-35) | 26 (11-30) | 22 (9.4-26) | 18 (7.6-22) | 15 (6.2-18) | 13 (5.0-15) |
| 6 | 69 | 65 | 60 | 54 | 48 | 42 | 36 | 31 | 27 | 23 | 19 |

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 | 6.8 | 5.5 | 4.5 | 3.7 | 3.0 | 2.5 | 2.0 | 1.7 | 1.4 | 1.2 | 1.0 |
| 1 | 12 (8.8-24) | 9.9 (7.2-21) | 8.2 (5.9-17) | 6.8 (4.8-15) | 5.6 (4.0-12) | 4.6 (3.2-10) | 3.8 (2.7-8.5) | 3.2 (2.3-7.2) | 2.7 (1.9-6.0) | 2.3 (1.6-5.1) | 1.9 (1.3-4.3) |
| 2 | 19 (11-33) | 16 (9.5-29) | 14 (7.8-25) | 11 (6.5-21) | 9.5 (5.3-18) | 7.9 (4.3-15) | 6.6 (3.6-12) | 5.6 (3.1-11) | 4.7 (2.6-9.0) | 4.0 (2.2-7.6) | 3.4 (1.8-6.4) |
| 3 | 28 (16-42) | 25 (13-37) | 21 (11-33) | 18 (9.0-28) | 15 (7.4-24) | 13 (6.1-21) | 11 (5.1-18) | 9.3 (4.3-15) | 7.9 (3.6-13) | 6.7 (3.0-11) | 5.7 (2.6-9.5) |
| 4 | 39 (21-51) | 35 (18-46) | 31 (15-41) | 27 (13-36) | 23 (11-31) | 20 (8.8-27) | 17 (7.4-24) | 15 (6.3-21) | 13 (5.3-18) | 11 (4.5-15) | 9.1 (3.8-13) |
| 5 | 51 (29-57) | 46 (25-53) | 42 (22-48) | 37 (18-43) | 33 (15-38) | 29 (13-33) | 25 (11-29) | 22 (9.4-26) | 19 (8.0-22) | 16 (6.7-20) | 14 (5.7-17) |
| 6 | 62 | 58 | 54 | 49 | 44 | 39 | 35 | 31 | 28 | 24 | 21 |