

The US (Asian) - 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 the US (Asian). 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 | 9.5 | 6.3 | 4.5 | 3.5 | 2.8 | 2.4 | 2.1 | 1.9 | 1.8 | 1.7 | 1.7 |
| 1 | 15 (13-18) | 9.7 (8.3-12) | 6.9 (5.5-8.7) | 5.3 (3.9-6.6) | 4.3 (3.0-5.5) | 3.6 (2.4-4.8) | 3.1 (2.0-4.2) | 2.8 (1.8-3.9) | 2.7 (1.7-3.8) | 2.6 (1.7-3.6) | 2.5 (1.6-3.5) |
| 2 | 22 (17-30) | 15 (11-21) | 10 (7.4-15) | 7.9 (5.1-12) | 6.4 (3.8-10) | 5.3 (3.0-8.9) | 4.6 (2.5-7.8) | 4.2 (2.2-7.2) | 4.0 (2.1-7.0) | 3.8 (2.0-6.7) | 3.7 (1.9-6.5) |
| 3 | 32 (23-42) | 22 (15-30) | 15 (9.9-23) | 12 (6.8-19) | 9.3 (5.0-16) | 7.8 (3.9-14) | 6.7 (3.2-12) | 6.1 (2.9-12) | 5.8 (2.7-11) | 5.6 (2.5-11) | 5.4 (2.4-10) |
| 4 | 44 (30-54) | 31 (21-38) | 22 (15-30) | 17 (11-24) | 13 (8.4-21) | 11 (6.5-18) | 9.6 (5.3-16) | 8.7 (4.7-15) | 8.3 (4.4-14) | 8.0 (4.1-14) | 7.7 (3.9-13) |
| 5 | 58 (48-66) | 42 (33-46) | 31 (24-36) | 24 (18-29) | 19 (14-25) | 16 (12-21) | 13 (9.9-19) | 12 (8.7-17) | 12 (8.1-17) | 11 (7.6-16) | 11 (7.3-15) |
| 6 | 73 | 56 | 42 | 32 | 26 | 22 | 18 | 17 | 16 | 15 | 15 |

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

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 | 12 | 8.4 | 6.4 | 5.1 | 4.2 | 3.5 | 3.0 | 2.8 | 2.7 | 2.5 | 2.4 |
| 1 | 18 (16-21) | 13 (11-15) | 9.6 (7.5-12) | 7.6 (5.6-9.6) | 6.2 (4.4-8.2) | 5.3 (3.6-7.1) | 4.5 (3.0-6.2) | 4.2 (2.8-5.8) | 4.0 (2.6-5.5) | 3.8 (2.4-5.3) | 3.6 (2.3-5.0) |
| 2 | 26 (21-34) | 19 (14-25) | 14 (9.7-20) | 11 (7.1-17) | 9.1 (5.4-14) | 7.7 (4.4-13) | 6.6 (3.6-11) | 6.2 (3.3-10) | 5.8 (3.1-9.9) | 5.5 (2.9-9.4) | 5.2 (2.7-9.0) |
| 3 | 36 (28-47) | 27 (19-38) | 20 (13-31) | 16 (9.4-26) | 13 (7.1-23) | 11 (5.7-20) | 9.5 (4.7-17) | 8.9 (4.3-16) | 8.4 (3.9-16) | 7.9 (3.7-15) | 7.5 (3.5-14) |
| 4 | 49 (36-57) | 37 (26-47) | 28 (20-39) | 23 (16-33) | 19 (12-28) | 16 (9.4-25) | 13 (7.7-22) | 13 (6.9-21) | 12 (6.4-20) | 11 (6.0-19) | 11 (5.7-18) |
| 5 | 63 (54-68) | 49 (41-55) | 38 (31-46) | 31 (25-39) | 25 (20-33) | 22 (17-29) | 19 (14-25) | 17 (12-24) | 16 (11-23) | 15 (11-22) | 15 (10-21) |
| 6 | 77 | 63 | 50 | 41 | 34 | 29 | 25 | 23 | 22 | 21 | 20 |

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 | 14 | 10 | 8.0 | 6.3 | 5.2 | 4.3 | 3.8 | 3.5 | 3.2 | 3.0 | 2.8 |
| 1 | 21 (18-24) | 15 (13-18) | 12 (9.2-14) | 9.4 (6.9-12) | 7.6 (5.4-10) | 6.4 (4.4-8.6) | 5.6 (3.8-7.7) | 5.1 (3.4-7.2) | 4.8 (3.1-6.7) | 4.5 (2.9-6.3) | 4.2 (2.7-5.9) |
| 2 | 29 (24-38) | 22 (17-29) | 17 (12-24) | 14 (8.8-20) | 11 (6.7-17) | 9.3 (5.4-15) | 8.1 (4.5-13) | 7.5 (4.1-12) | 7.0 (3.7-12) | 6.5 (3.4-11) | 6.1 (3.2-10) |
| 3 | 40 (32-52) | 31 (22-43) | 24 (16-36) | 19 (12-31) | 16 (8.8-27) | 13 (7.0-23) | 12 (5.9-21) | 11 (5.3-19) | 9.9 (4.8-18) | 9.3 (4.4-17) | 8.7 (4.1-16) |
| 4 | 53 (41-63) | 42 (31-53) | 33 (24-45) | 27 (19-38) | 22 (15-33) | 18 (11-29) | 16 (9.6-26) | 15 (8.5-24) | 14 (7.8-23) | 13 (7.2-22) | 12 (6.7-20) |
| 5 | 67 (60-72) | 54 (47-61) | 44 (37-52) | 36 (30-44) | 30 (24-38) | 25 (19-33) | 22 (16-30) | 20 (15-28) | 19 (13-26) | 18 (12-25) | 17 (11-24) |
| 6 | 79 | 67 | 56 | 47 | 39 | 33 | 30 | 27 | 26 | 24 | 23 |

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

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 | 16 | 12 | 9.2 | 7.3 | 5.8 | 4.8 | 4.3 | 3.9 | 3.5 | 3.2 | 3.0 |
| 1 | 23 (20-26) | 17 (15-20) | 13 (11-16) | 11 (8.0-13) | 8.6 (6.2-11) | 7.0 (4.9-9.4) | 6.3 (4.3-8.6) | 5.7 (3.8-7.9) | 5.2 (3.4-7.3) | 4.8 (3.1-6.7) | 4.4 (2.9-6.2) |
| 2 | 32 (27-40) | 25 (19-31) | 19 (14-26) | 15 (10-22) | 12 (7.8-18) | 10 (6.1-16) | 9.0 (5.2-14) | 8.2 (4.6-13) | 7.5 (4.1-12) | 6.9 (3.7-11) | 6.4 (3.4-10) |
| 3 | 44 (35-55) | 34 (25-47) | 27 (18-39) | 21 (13-33) | 17 (10-28) | 14 (8.0-24) | 13 (6.8-22) | 12 (5.9-20) | 11 (5.3-19) | 9.7 (4.8-18) | 9.0 (4.4-16) |
| 4 | 56 (45-66) | 45 (35-56) | 36 (27-48) | 29 (22-41) | 24 (17-35) | 20 (13-30) | 18 (11-28) | 16 (9.6-26) | 15 (8.5-24) | 14 (7.7-22) | 13 (7.0-21) |
| 5 | 69 (63-74) | 57 (52-64) | 47 (41-55) | 39 (33-47) | 32 (27-41) | 27 (21-35) | 24 (18-32) | 22 (16-30) | 20 (14-28) | 18 (13-26) | 17 (12-24) |
| 6 | 81 | 70 | 59 | 50 | 42 | 35 | 32 | 29 | 27 | 25 | 23 |

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 | 19 | 14 | 11 | 8.3 | 6.6 | 5.4 | 4.8 | 4.2 | 3.8 | 3.4 | 3.1 |
| 1 | 27 (24-32) | 20 (17-24) | 15 (13-18) | 12 (9.4-14) | 9.3 (7.1-11) | 7.6 (5.7-8.8) | 6.6 (4.9-7.7) | 5.9 (4.2-6.9) | 5.2 (3.7-6.2) | 4.7 (3.3-5.6) | 4.2 (3.0-5.1) |
| 2 | 38 (31-48) | 29 (22-37) | 22 (16-28) | 17 (12-22) | 13 (9.1-17) | 11 (7.1-14) | 9.2 (6.0-12) | 8.1 (5.1-11) | 7.2 (4.5-9.9) | 6.4 (4.0-8.9) | 5.8 (3.5-8.1) |
| 3 | 51 (40-64) | 40 (29-52) | 31 (22-41) | 23 (16-33) | 18 (12-27) | 15 (9.4-22) | 13 (7.8-19) | 11 (6.7-17) | 9.7 (5.8-15) | 8.7 (5.1-14) | 7.8 (4.6-12) |
| 4 | 66 (55-74) | 53 (42-62) | 42 (32-51) | 32 (24-41) | 25 (19-34) | 20 (15-28) | 17 (12-24) | 15 (11-22) | 13 (9.3-19) | 12 (8.1-17) | 10 (7.2-16) |
| 5 | 79 (73-83) | 68 (60-72) | 55 (48-61) | 44 (37-50) | 34 (29-40) | 28 (23-34) | 23 (20-29) | 20 (17-26) | 17 (15-23) | 16 (13-21) | 14 (12-19) |
| 6 | 88 | 80 | 69 | 57 | 46 | 37 | 31 | 27 | 23 | 20 | 18 |

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

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 | 22 | 17 | 13 | 9.6 | 7.5 | 6.3 | 5.4 | 4.7 | 4.1 | 3.6 | 3.2 |
| 1 | 33 (27-49) | 25 (20-37) | 19 (15-27) | 14 (11-20) | 11 (8.4-14) | 8.9 (6.8-11) | 7.5 (5.6-8.6) | 6.4 (4.8-7.5) | 5.5 (4.1-6.5) | 4.8 (3.6-5.8) | 4.2 (3.1-5.1) |
| 2 | 47 (35-67) | 37 (26-54) | 28 (20-42) | 21 (15-31) | 16 (11-23) | 13 (8.6-18) | 10 (7.1-14) | 8.8 (5.9-12) | 7.5 (5.0-10) | 6.4 (4.3-9.1) | 5.6 (3.7-8.1) |
| 3 | 63 (46-78) | 51 (35-67) | 40 (26-54) | 31 (19-42) | 23 (14-32) | 18 (11-26) | 15 (9.3-21) | 12 (7.7-17) | 10 (6.5-14) | 8.6 (5.6-12) | 7.4 (4.9-10) |
| 4 | 77 (58-86) | 67 (46-78) | 55 (36-66) | 44 (27-53) | 33 (21-41) | 26 (17-33) | 21 (14-27) | 17 (12-22) | 14 (10-18) | 12 (8.7-16) | 9.8 (7.3-13) |
| 5 | 86 (74-90) | 80 (63-85) | 71 (52-76) | 59 (41-64) | 47 (32-52) | 37 (26-42) | 30 (22-34) | 24 (19-28) | 19 (16-23) | 16 (13-19) | 13 (11-16) |
| 6 | 91 | 89 | 83 | 74 | 62 | 51 | 41 | 33 | 26 | 21 | 18 |

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 | 26 | 20 | 16 | 12 | 9.6 | 8.0 | 6.8 | 5.8 | 5.0 | 4.3 | 3.8 |
| 1 | 38 (31-54) | 29 (24-43) | 23 (18-33) | 18 (14-24) | 14 (11-19) | 11 (8.7-15) | 9.5 (7.2-12) | 8.0 (6.0-9.3) | 6.8 (5.1-8.0) | 5.8 (4.3-6.9) | 5.0 (3.7-6.0) |
| 2 | 51 (40-71) | 42 (31-60) | 33 (24-48) | 25 (18-38) | 20 (14-29) | 16 (11-23) | 13 (9.1-19) | 11 (7.5-15) | 9.3 (6.3-12) | 7.8 (5.3-10) | 6.7 (4.5-9.1) |
| 3 | 66 (50-80) | 56 (40-71) | 45 (31-60) | 36 (24-48) | 28 (18-38) | 23 (15-31) | 19 (12-26) | 15 (9.9-21) | 13 (8.2-18) | 11 (6.9-15) | 9.0 (5.9-12) |
| 4 | 78 (61-86) | 70 (50-79) | 60 (40-70) | 49 (32-59) | 40 (25-48) | 32 (21-40) | 26 (17-33) | 21 (14-27) | 18 (12-23) | 14 (10-19) | 12 (8.8-16) |
| 5 | 85 (74-89) | 81 (65-85) | 73 (55-78) | 64 (46-69) | 53 (37-59) | 45 (31-49) | 37 (26-41) | 30 (22-34) | 24 (19-28) | 20 (16-24) | 16 (14-20) |
| 6 | 89 | 87 | 83 | 77 | 68 | 59 | 49 | 41 | 33 | 27 | 22 |

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

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 | 26 | 20 | 16 | 12 | 10 | 8.4 | 7.1 | 6.0 | 5.1 | 4.4 | 3.7 |
| 1 | 36 (30-52) | 29 (23-41) | 23 (18-32) | 18 (14-25) | 15 (11-20) | 12 (9.2-16) | 10 (7.6-13) | 8.4 (6.3-10) | 7.0 (5.3-8.3) | 5.9 (4.4-6.9) | 5.0 (3.7-5.9) |
| 2 | 49 (38-68) | 41 (30-58) | 33 (23-48) | 26 (18-38) | 21 (15-31) | 17 (12-25) | 14 (9.7-20) | 12 (8.0-17) | 9.8 (6.6-13) | 8.2 (5.5-11) | 6.9 (4.6-9.0) |
| 3 | 63 (48-77) | 54 (38-69) | 45 (30-59) | 36 (24-48) | 30 (19-40) | 25 (16-33) | 20 (13-28) | 17 (11-23) | 14 (8.7-19) | 11 (7.3-16) | 9.4 (6.1-13) |
| 4 | 75 (58-83) | 68 (49-77) | 59 (40-69) | 49 (32-59) | 41 (26-50) | 35 (22-42) | 28 (18-35) | 23 (15-29) | 19 (13-24) | 16 (11-20) | 13 (9.0-17) |
| 5 | 83 (71-87) | 79 (63-83) | 72 (54-77) | 63 (45-69) | 55 (38-61) | 47 (32-52) | 39 (27-44) | 33 (23-37) | 27 (19-31) | 22 (16-26) | 18 (14-21) |
| 6 | 88 | 86 | 82 | 76 | 69 | 61 | 53 | 45 | 37 | 31 | 25 |

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 | 20 | 16 | 13 | 10 | 8.5 | 7.1 | 5.9 | 5.0 | 4.2 | 3.5 | 3.0 |
| 1 | 29 (23-42) | 23 (18-34) | 18 (14-27) | 15 (11-21) | 12 (9.3-17) | 10 (7.7-14) | 8.5 (6.4-11) | 7.1 (5.3-9.3) | 5.9 (4.4-7.5) | 4.9 (3.7-6.1) | 4.1 (3.1-5.0) |
| 2 | 40 (30-56) | 33 (24-48) | 27 (19-39) | 21 (15-32) | 18 (12-27) | 15 (10-22) | 12 (8.3-18) | 10 (6.8-15) | 8.4 (5.7-12) | 7.0 (4.7-10) | 5.8 (3.9-8.1) |
| 3 | 53 (38-67) | 45 (31-59) | 37 (24-50) | 31 (20-42) | 26 (16-35) | 21 (13-29) | 18 (11-24) | 15 (9.1-20) | 12 (7.5-17) | 10 (6.2-14) | 8.2 (5.1-12) |
| 4 | 65 (47-75) | 58 (40-68) | 50 (32-60) | 42 (26-51) | 36 (22-44) | 30 (19-38) | 25 (15-32) | 21 (13-27) | 17 (11-22) | 14 (9.0-18) | 12 (7.5-15) |
| 5 | 76 (60-81) | 70 (53-76) | 63 (45-69) | 56 (38-61) | 49 (32-54) | 42 (28-47) | 36 (23-40) | 30 (20-34) | 25 (17-29) | 21 (14-24) | 17 (12-20) |
| 6 | 83 | 80 | 75 | 69 | 63 | 56 | 48 | 41 | 35 | 29 | 24 |