



Morocco - 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 Morocco. 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 | 6.5 | 3.5 | 1.8 | 1.0 | 0.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| 1 | 10 (6.8-13) | 5.5 (3.6-7.2) | 2.9 (1.9-3.9) | 1.5 (1.0-2.0) | 0.8 (0.5-1.1) | 0.4 (0.3-0.6) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) | 0.0 (0.0-0.0) | 0.0 (0.0-0.0) |
| 2 | 16 (9.5-23) | 8.6 (5.1-13) | 4.6 (2.7-7.0) | 2.4 (1.4-3.7) | 1.3 (0.8-2.0) | 0.7 (0.4-1.0) | 0.4 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) | 0.0 (0.0-0.0) |
| 3 | 23 (14-35) | 13 (7.7-21) | 7.2 (4.1-11) | 3.8 (2.2-6.2) | 2.0 (1.1-3.3) | 1.1 (0.6-1.8) | 0.6 (0.3-0.9) | 0.3 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.1) | 0.0 (0.0-0.1) |
| 4 | 34 (23-48) | 20 (13-29) | 11 (6.9-17) | 6.0 (3.7-9.3) | 3.2 (1.9-5.0) | 1.7 (1.0-2.7) | 0.9 (0.5-1.4) | 0.5 (0.3-0.7) | 0.2 (0.2-0.4) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) |
| 5 | 47 (37-59) | 29 (22-39) | 16 (12-23) | 9.1 (6.6-13) | 4.9 (3.5-7.0) | 2.6 (1.9-3.8) | 1.4 (1.0-2.0) | 0.7 (0.5-1.0) | 0.4 (0.3-0.6) | 0.2 (0.2-0.3) | 0.1 (0.1-0.2) |
| 6 | 61 | 40 | 24 | 14 | 7.4 | 3.9 | 2.1 | 1.1 | 0.6 | 0.3 | 0.2 |

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

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 | 7.1 | 3.9 | 2.2 | 1.2 | 0.6 | 0.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 |
| 1 | 11 (7.4-13) | 6.1 (4.1-7.6) | 3.4 (2.3-4.2) | 1.9 (1.2-2.3) | 1.0 (0.7-1.3) | 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 (0.0-0.1) | 0.0 (0.0-0.0) |
| 2 | 16 (10-23) | 9.3 (5.8-13) | 5.2 (3.2-7.5) | 2.9 (1.8-4.2) | 1.6 (1.0-2.3) | 0.9 (0.5-1.3) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) | 0.1 (0.1-0.2) | 0.1 (0.1-0.1) | 0.0 (0.0-0.1) |
| 3 | 24 (15-34) | 14 (8.7-21) | 8.0 (4.9-12) | 4.4 (2.7-6.8) | 2.5 (1.5-3.8) | 1.3 (0.8-2.1) | 0.7 (0.4-1.1) | 0.4 (0.2-0.6) | 0.2 (0.1-0.4) | 0.1 (0.1-0.2) | 0.1 (0.0-0.1) |
| 4 | 34 (24-46) | 20 (14-29) | 12 (8.0-18) | 6.7 (4.4-10) | 3.7 (2.5-5.7) | 2.1 (1.3-3.2) | 1.1 (0.7-1.7) | 0.6 (0.4-1.0) | 0.3 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) |
| 5 | 45 (38-57) | 29 (23-39) | 17 (14-24) | 10 (7.8-14) | 5.6 (4.4-8.0) | 3.1 (2.4-4.5) | 1.7 (1.3-2.5) | 0.9 (0.7-1.4) | 0.5 (0.4-0.8) | 0.3 (0.2-0.4) | 0.2 (0.1-0.2) |
| 6 | 58 | 40 | 25 | 15 | 8.4 | 4.7 | 2.6 | 1.4 | 0.8 | 0.5 | 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 | 7.0 | 4.1 | 2.4 | 1.4 | 0.8 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 |
| 1 | 10 (7.4-12) | 6.3 (4.4-7.4) | 3.7 (2.6-4.4) | 2.2 (1.5-2.6) | 1.3 (0.9-1.5) | 0.7 (0.5-0.9) | 0.4 (0.3-0.5) | 0.2 (0.2-0.3) | 0.1 (0.1-0.2) | 0.1 (0.1-0.1) | 0.1 (0.0-0.1) |
| 2 | 15 (10-20) | 9.3 (6.1-13) | 5.6 (3.6-7.6) | 3.3 (2.1-4.5) | 1.9 (1.2-2.6) | 1.1 (0.7-1.5) | 0.7 (0.4-0.9) | 0.4 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) | 0.1 (0.1-0.1) |
| 3 | 22 (15-29) | 14 (9.2-19) | 8.2 (5.5-12) | 4.9 (3.2-7.0) | 2.9 (1.9-4.2) | 1.7 (1.1-2.5) | 1.0 (0.6-1.4) | 0.6 (0.4-0.8) | 0.3 (0.2-0.5) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) |
| 4 | 30 (23-40) | 19 (14-27) | 12 (8.6-17) | 7.3 (5.1-10) | 4.3 (3.0-6.3) | 2.5 (1.8-3.7) | 1.5 (1.0-2.2) | 0.9 (0.6-1.3) | 0.5 (0.4-0.8) | 0.3 (0.2-0.5) | 0.2 (0.1-0.3) |
| 5 | 40 (35-50) | 27 (23-35) | 17 (14-23) | 11 (8.7-14) | 6.3 (5.2-8.8) | 3.8 (3.1-5.3) | 2.2 (1.8-3.1) | 1.3 (1.1-1.8) | 0.8 (0.6-1.1) | 0.5 (0.4-0.7) | 0.3 (0.2-0.4) |
| 6 | 51 | 36 | 24 | 15 | 9.2 | 5.5 | 3.3 | 1.9 | 1.2 | 0.7 | 0.4 |

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

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 | 6.7 | 4.2 | 2.6 | 1.6 | 1.0 | 0.6 | 0.4 | 0.2 | 0.2 | 0.1 | 0.1 |
| 1 | 9.6 (7.0-11) | 6.1 (4.4-6.9) | 3.8 (2.7-4.4) | 2.4 (1.7-2.7) | 1.5 (1.1-1.7) | 0.9 (0.7-1.1) | 0.6 (0.4-0.7) | 0.4 (0.3-0.4) | 0.2 (0.2-0.3) | 0.1 (0.1-0.2) | 0.1 (0.1-0.1) |
| 2 | 14 (9.7-17) | 8.8 (6.2-11) | 5.6 (3.9-7.2) | 3.5 (2.4-4.6) | 2.2 (1.5-2.9) | 1.4 (0.9-1.8) | 0.8 (0.6-1.1) | 0.5 (0.4-0.7) | 0.3 (0.2-0.4) | 0.2 (0.1-0.3) | 0.1 (0.1-0.2) |
| 3 | 19 (14-25) | 13 (9.2-17) | 8.1 (5.8-11) | 5.1 (3.7-6.9) | 3.2 (2.3-4.3) | 2.0 (1.4-2.7) | 1.2 (0.9-1.7) | 0.8 (0.5-1.1) | 0.5 (0.3-0.7) | 0.3 (0.2-0.4) | 0.2 (0.1-0.3) |
| 4 | 26 (21-33) | 18 (14-23) | 11 (8.8-15) | 7.4 (5.6-10) | 4.7 (3.5-6.5) | 2.9 (2.2-4.1) | 1.8 (1.4-2.6) | 1.2 (0.9-1.6) | 0.7 (0.6-1.0) | 0.5 (0.4-0.7) | 0.3 (0.2-0.4) |
| 5 | 34 (30-42) | 24 (21-30) | 16 (14-21) | 10 (9.1-14) | 6.7 (5.8-9.0) | 4.2 (3.7-5.8) | 2.7 (2.3-3.6) | 1.7 (1.4-2.3) | 1.1 (0.9-1.5) | 0.7 (0.6-1.0) | 0.4 (0.4-0.6) |
| 6 | 43 | 31 | 22 | 15 | 9.4 | 6.0 | 3.8 | 2.4 | 1.6 | 1.0 | 0.6 |

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 | 5.6 | 3.8 | 2.5 | 1.6 | 1.1 | 0.7 | 0.5 | 0.3 | 0.2 | 0.1 | 0.1 |
| 1 | 8.9 (7.9-12) | 6.0 (5.3-7.8) | 4.0 (3.5-5.2) | 2.7 (2.3-3.5) | 1.8 (1.5-2.3) | 1.2 (1.0-1.5) | 0.8 (0.7-1.0) | 0.5 (0.4-0.7) | 0.3 (0.3-0.5) | 0.2 (0.2-0.3) | 0.2 (0.1-0.2) |
| 2 | 14 (11-17) | 9.3 (7.6-12) | 6.3 (5.1-8.3) | 4.2 (3.4-5.6) | 2.8 (2.3-3.7) | 1.9 (1.5-2.5) | 1.2 (1.0-1.6) | 0.8 (0.7-1.1) | 0.6 (0.5-0.8) | 0.4 (0.3-0.5) | 0.3 (0.2-0.4) |
| 3 | 20 (16-25) | 14 (11-18) | 9.8 (7.6-12) | 6.7 (5.1-8.5) | 4.5 (3.4-5.7) | 3.0 (2.3-3.8) | 2.0 (1.5-2.5) | 1.3 (1.0-1.7) | 0.9 (0.7-1.2) | 0.6 (0.5-0.8) | 0.4 (0.3-0.5) |
| 4 | 29 (23-34) | 21 (17-25) | 15 (11-18) | 10 (7.8-12) | 7.0 (5.3-8.5) | 4.7 (3.5-5.7) | 3.1 (2.3-3.8) | 2.1 (1.6-2.6) | 1.5 (1.1-1.8) | 1.0 (0.7-1.2) | 0.7 (0.5-0.8) |
| 5 | 39 (32-43) | 30 (24-33) | 22 (17-24) | 16 (12-17) | 11 (8.1-12) | 7.3 (5.5-8.1) | 4.9 (3.7-5.5) | 3.4 (2.5-3.8) | 2.3 (1.7-2.6) | 1.6 (1.2-1.8) | 1.1 (0.8-1.2) |
| 6 | 50 | 40 | 31 | 23 | 16 | 11 | 7.7 | 5.3 | 3.7 | 2.5 | 1.7 |

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

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 | 4.6 | 3.2 | 2.3 | 1.6 | 1.1 | 0.8 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 |
| 1 | 8.4 (6.2-18) | 6.1 (4.4-13) | 4.3 (3.1-9.4) | 3.1 (2.2-6.7) | 2.2 (1.6-4.8) | 1.5 (1.1-3.3) | 1.1 (0.8-2.3) | 0.8 (0.6-1.7) | 0.5 (0.4-1.2) | 0.4 (0.3-0.9) | 0.3 (0.2-0.6) |
| 2 | 14 (8.6-25) | 10 (6.2-19) | 7.6 (4.4-14) | 5.4 (3.1-10) | 3.9 (2.2-7.2) | 2.7 (1.6-5.2) | 1.9 (1.1-3.7) | 1.4 (0.8-2.6) | 1.0 (0.6-1.9) | 0.7 (0.4-1.4) | 0.5 (0.3-1.0) |
| 3 | 22 (12-33) | 17 (8.6-26) | 12 (6.2-20) | 9.1 (4.4-15) | 6.6 (3.1-11) | 4.7 (2.2-7.7) | 3.3 (1.6-5.5) | 2.4 (1.1-4.0) | 1.8 (0.8-2.9) | 1.3 (0.6-2.1) | 0.9 (0.4-1.5) |
| 4 | 32 (17-41) | 25 (12-33) | 19 (9.0-26) | 15 (6.5-20) | 11 (4.7-15) | 7.8 (3.3-11) | 5.6 (2.4-7.7) | 4.1 (1.7-5.6) | 3.0 (1.2-4.1) | 2.2 (0.9-3.0) | 1.6 (0.6-2.2) |
| 5 | 43 (23-50) | 36 (18-42) | 28 (13-33) | 22 (9.6-26) | 17 (6.9-20) | 12 (5.0-15) | 9.0 (3.6-11) | 6.6 (2.6-7.9) | 4.9 (1.9-5.8) | 3.6 (1.4-4.2) | 2.6 (1.0-3.1) |
| 6 | 55 | 47 | 39 | 32 | 25 | 19 | 14 | 11 | 7.8 | 5.8 | 4.3 |

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 | 3.9 | 2.9 | 2.1 | 1.6 | 1.2 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 |
| 1 | 7.0 (5.0-15) | 5.3 (3.8-12) | 4.0 (2.8-8.8) | 3.0 (2.1-6.6) | 2.2 (1.5-5.0) | 1.6 (1.1-3.7) | 1.2 (0.8-2.8) | 0.9 (0.6-2.1) | 0.7 (0.5-1.6) | 0.5 (0.4-1.2) | 0.4 (0.3-0.9) |
| 2 | 12 (6.5-21) | 8.9 (4.9-17) | 6.8 (3.7-13) | 5.1 (2.8-9.8) | 3.9 (2.1-7.4) | 2.9 (1.5-5.6) | 2.2 (1.1-4.2) | 1.7 (0.9-3.2) | 1.3 (0.7-2.4) | 1.0 (0.5-1.9) | 0.7 (0.4-1.4) |
| 3 | 18 (9.0-28) | 14 (6.9-23) | 11 (5.2-18) | 8.4 (3.9-14) | 6.4 (2.9-11) | 4.8 (2.2-8.1) | 3.6 (1.6-6.2) | 2.8 (1.2-4.8) | 2.2 (1.0-3.7) | 1.6 (0.7-2.8) | 1.3 (0.6-2.2) |
| 4 | 26 (12-35) | 21 (9.6-29) | 17 (7.3-23) | 13 (5.5-19) | 10 (4.2-14) | 7.7 (3.1-11) | 5.9 (2.4-8.5) | 4.6 (1.8-6.7) | 3.5 (1.4-5.1) | 2.7 (1.1-4.0) | 2.1 (0.8-3.0) |
| 5 | 36 (18-42) | 30 (14-35) | 24 (11-29) | 20 (8.2-23) | 15 (6.2-18) | 12 (4.7-14) | 9.2 (3.6-11) | 7.2 (2.8-8.6) | 5.6 (2.1-6.7) | 4.4 (1.6-5.2) | 3.4 (1.3-4.1) |
| 6 | 47 | 40 | 34 | 28 | 22 | 18 | 14 | 11 | 8.7 | 6.8 | 5.3 |

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

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 | 3.2 | 2.5 | 2.0 | 1.6 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 |
| 1 | 5.8 (4.1-13) | 4.6 (3.2-10) | 3.6 (2.5-8.1) | 2.9 (2.0-6.5) | 2.3 (1.6-5.1) | 1.8 (1.2-4.0) | 1.4 (1.0-3.2) | 1.1 (0.8-2.6) | 0.9 (0.6-2.1) | 0.7 (0.5-1.7) | 0.6 (0.4-1.3) |
| 2 | 9.7 (5.3-18) | 7.8 (4.2-15) | 6.2 (3.3-12) | 4.9 (2.6-9.5) | 3.9 (2.1-7.6) | 3.1 (1.6-6.0) | 2.4 (1.3-4.8) | 2.0 (1.0-3.9) | 1.6 (0.8-3.1) | 1.3 (0.7-2.5) | 1.0 (0.5-2.0) |
| 3 | 15 (7.4-24) | 12 (5.9-20) | 9.9 (4.7-16) | 8.0 (3.7-13) | 6.4 (2.9-11) | 5.1 (2.3-8.5) | 4.1 (1.8-6.8) | 3.3 (1.5-5.6) | 2.7 (1.2-4.5) | 2.2 (1.0-3.7) | 1.7 (0.8-3.0) |
| 4 | 22 (10-31) | 18 (8.2-26) | 15 (6.5-21) | 12 (5.2-18) | 10 (4.1-14) | 8.0 (3.2-12) | 6.5 (2.6-9.4) | 5.3 (2.1-7.7) | 4.3 (1.7-6.3) | 3.5 (1.4-5.1) | 2.8 (1.1-4.2) |
| 5 | 31 (15-37) | 27 (12-31) | 22 (9.6-26) | 18 (7.7-22) | 15 (6.1-18) | 12 (4.8-15) | 10 (3.9-12) | 8.2 (3.1-9.9) | 6.7 (2.6-8.2) | 5.5 (2.1-6.7) | 4.5 (1.7-5.4) |
| 6 | 42 | 36 | 31 | 26 | 22 | 18 | 15 | 12 | 10 | 8.4 | 6.9 |

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 | 2.7 | 2.3 | 1.9 | 1.5 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 |
| 1 | 5.0 (3.5-11) | 4.1 (2.9-9.1) | 3.4 (2.4-7.6) | 2.8 (1.9-6.3) | 2.3 (1.6-5.2) | 1.9 (1.3-4.3) | 1.6 (1.1-3.6) | 1.3 (0.9-3.1) | 1.1 (0.8-2.6) | 1.0 (0.7-2.2) | 0.8 (0.6-1.9) |
| 2 | 8.3 (4.5-16) | 6.9 (3.7-13) | 5.8 (3.1-11) | 4.8 (2.5-9.3) | 4.0 (2.1-7.8) | 3.3 (1.7-6.4) | 2.8 (1.4-5.4) | 2.3 (1.2-4.6) | 2.0 (1.0-3.9) | 1.7 (0.9-3.3) | 1.4 (0.7-2.8) |
| 3 | 13 (6.3-21) | 11 (5.2-18) | 9.3 (4.3-15) | 7.8 (3.6-13) | 6.5 (2.9-11) | 5.4 (2.4-8.9) | 4.6 (2.0-7.6) | 3.9 (1.7-6.5) | 3.3 (1.5-5.5) | 2.8 (1.2-4.7) | 2.4 (1.0-4.0) |
| 4 | 19 (8.7-27) | 17 (7.2-23) | 14 (6.0-20) | 12 (5.0-17) | 10 (4.1-14) | 8.4 (3.4-12) | 7.2 (2.9-10) | 6.2 (2.4-9.0) | 5.3 (2.1-7.7) | 4.5 (1.7-6.6) | 3.8 (1.5-5.6) |
| 5 | 28 (13-33) | 24 (11-29) | 21 (8.9-25) | 18 (7.4-21) | 15 (6.1-18) | 13 (5.1-15) | 11 (4.3-13) | 9.5 (3.7-11) | 8.1 (3.1-9.9) | 7.0 (2.6-8.5) | 6.0 (2.2-7.3) |
| 6 | 38 | 33 | 29 | 25 | 22 | 19 | 16 | 14 | 12 | 11 | 9.1 |