

Finland - 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 Finland. 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 | 16 | 10 | 6.8 | 4.9 | 3.8 | 3.1 | 2.6 | 2.4 | 2.3 | 2.2 | 2.1 |
| 1 | 24 (21-30) | 15 (14-19) | 10 (8.9-13) | 7.5 (5.9-9.4) | 5.8 (4.3-7.2) | 4.7 (3.3-6.1) | 4.0 (2.7-5.3) | 3.6 (2.4-4.9) | 3.4 (2.2-4.7) | 3.2 (2.1-4.5) | 3.1 (2.0-4.4) |
| 2 | 35 (27-48) | 23 (18-32) | 16 (12-22) | 11 (7.9-16) | 8.6 (5.5-13) | 7.0 (4.1-11) | 5.9 (3.3-9.8) | 5.3 (2.8-9.0) | 5.0 (2.6-8.6) | 4.8 (2.5-8.3) | 4.6 (2.3-8.0) |
| 3 | 49 (36-63) | 33 (24-43) | 23 (16-32) | 17 (11-25) | 13 (7.3-21) | 10 (5.4-18) | 8.6 (4.3-16) | 7.7 (3.7-14) | 7.3 (3.4-14) | 6.9 (3.2-13) | 6.7 (3.0-13) |
| 4 | 64 (47-77) | 46 (32-56) | 32 (22-40) | 24 (16-32) | 18 (12-27) | 15 (9.1-23) | 12 (7.1-20) | 11 (6.1-18) | 10 (5.5-17) | 9.9 (5.2-17) | 9.5 (4.9-16) |
| 5 | 78 (68-86) | 60 (50-68) | 44 (35-49) | 33 (26-39) | 25 (20-32) | 20 (16-27) | 17 (13-23) | 15 (11-21) | 14 (10-20) | 14 (9.5-19) | 13 (9.0-19) |
| 6 | 89 | 75 | 58 | 44 | 34 | 28 | 23 | 21 | 20 | 19 | 18 |

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

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 | 16 | 11 | 7.6 | 5.7 | 4.5 | 3.6 | 3.1 | 2.8 | 2.6 | 2.5 | 2.3 |
| 1 | 24 (21-28) | 16 (14-20) | 12 (9.7-14) | 8.6 (6.8-10) | 6.7 (5.0-8.4) | 5.5 (3.9-7.1) | 4.6 (3.1-6.1) | 4.2 (2.8-5.7) | 3.9 (2.6-5.4) | 3.7 (2.4-5.2) | 3.5 (2.3-4.9) |
| 2 | 34 (28-45) | 24 (19-32) | 17 (13-23) | 13 (8.9-18) | 9.9 (6.4-15) | 8.0 (4.8-13) | 6.7 (3.8-11) | 6.2 (3.4-10) | 5.7 (3.1-9.7) | 5.4 (2.8-9.2) | 5.1 (2.7-8.7) |
| 3 | 47 (36-59) | 34 (26-43) | 24 (17-34) | 18 (12-28) | 14 (8.5-23) | 12 (6.4-20) | 9.7 (5.0-17) | 8.9 (4.4-16) | 8.3 (4.0-15) | 7.8 (3.7-15) | 7.4 (3.4-14) |
| 4 | 62 (47-72) | 46 (33-54) | 34 (24-43) | 26 (18-35) | 20 (14-29) | 16 (11-25) | 14 (8.3-22) | 13 (7.2-20) | 12 (6.5-19) | 11 (6.0-18) | 10 (5.6-18) |
| 5 | 76 (68-83) | 60 (51-65) | 46 (38-51) | 35 (29-42) | 28 (22-35) | 23 (18-30) | 19 (15-26) | 17 (13-24) | 16 (12-23) | 15 (11-21) | 14 (9.9-20) |
| 6 | 87 | 74 | 59 | 47 | 37 | 31 | 26 | 24 | 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 | 17 | 12 | 8.4 | 6.3 | 4.9 | 4.0 | 3.4 | 3.1 | 2.8 | 2.6 | 2.4 |
| 1 | 25 (22-28) | 17 (15-20) | 12 (10-14) | 9.4 (7.4-11) | 7.3 (5.5-9.1) | 5.9 (4.2-7.7) | 5.0 (3.5-6.7) | 4.5 (3.1-6.2) | 4.2 (2.8-5.8) | 3.9 (2.5-5.4) | 3.6 (2.3-5.1) |
| 2 | 35 (29-44) | 25 (21-32) | 18 (14-24) | 14 (9.8-19) | 11 (7.0-16) | 8.6 (5.3-13) | 7.3 (4.3-12) | 6.6 (3.7-11) | 6.1 (3.3-10) | 5.6 (3.0-9.4) | 5.3 (2.8-8.8) |
| 3 | 47 (38-57) | 35 (27-44) | 26 (19-36) | 19 (13-29) | 15 (9.4-24) | 12 (7.0-21) | 10 (5.6-18) | 9.5 (4.8-17) | 8.7 (4.3-16) | 8.1 (3.9-15) | 7.5 (3.6-14) |
| 4 | 61 (48-69) | 47 (35-54) | 35 (26-44) | 27 (20-37) | 21 (15-31) | 17 (12-26) | 15 (9.2-23) | 13 (7.9-21) | 12 (7.0-20) | 11 (6.3-19) | 11 (5.8-18) |
| 5 | 74 (68-80) | 60 (53-64) | 47 (40-53) | 37 (31-43) | 29 (24-36) | 24 (19-31) | 20 (16-27) | 18 (14-25) | 17 (12-23) | 16 (11-22) | 15 (10-20) |
| 6 | 85 | 73 | 60 | 48 | 39 | 32 | 27 | 25 | 23 | 21 | 20 |

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

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 | 20 | 15 | 11 | 8.1 | 6.3 | 5.1 | 4.4 | 3.9 | 3.6 | 3.3 | 3.0 |
| 1 | 29 (27-32) | 21 (19-24) | 16 (13-18) | 12 (9.5-14) | 9.3 (7.1-12) | 7.4 (5.4-9.6) | 6.5 (4.5-8.7) | 5.8 (3.9-7.9) | 5.2 (3.5-7.3) | 4.8 (3.2-6.7) | 4.4 (2.9-6.2) |
| 2 | 40 (34-48) | 30 (25-37) | 22 (17-28) | 17 (12-23) | 13 (9.1-19) | 11 (6.8-16) | 9.3 (5.6-14) | 8.3 (4.8-13) | 7.5 (4.2-12) | 6.9 (3.8-11) | 6.3 (3.4-10) |
| 3 | 52 (43-61) | 40 (33-50) | 31 (23-42) | 24 (17-35) | 19 (12-29) | 15 (9.0-25) | 13 (7.4-22) | 12 (6.3-20) | 11 (5.5-19) | 9.7 (4.9-17) | 9.0 (4.4-16) |
| 4 | 65 (54-71) | 52 (42-60) | 41 (32-51) | 32 (24-43) | 26 (19-36) | 21 (15-31) | 18 (12-28) | 16 (10-26) | 15 (8.8-24) | 14 (7.8-22) | 12 (7.1-20) |
| 5 | 77 (72-80) | 65 (59-70) | 53 (47-59) | 43 (37-50) | 34 (30-42) | 28 (24-36) | 25 (19-32) | 22 (17-30) | 20 (15-27) | 18 (13-25) | 17 (12-24) |
| 6 | 86 | 76 | 65 | 54 | 45 | 37 | 33 | 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 | 25 | 18 | 14 | 10 | 7.9 | 6.4 | 5.5 | 4.8 | 4.3 | 3.8 | 3.5 |
| 1 | 35 (32-42) | 26 (23-31) | 20 (17-23) | 15 (12-17) | 11 (9.0-13) | 9.1 (7.0-11) | 7.7 (5.8-9.0) | 6.7 (4.9-7.8) | 5.9 (4.3-7.0) | 5.3 (3.7-6.3) | 4.7 (3.3-5.7) |
| 2 | 49 (41-59) | 37 (30-46) | 28 (22-36) | 21 (16-27) | 16 (12-21) | 13 (8.9-17) | 11 (7.2-14) | 9.3 (6.0-12) | 8.1 (5.2-11) | 7.2 (4.5-9.9) | 6.5 (4.0-9.0) |
| 3 | 63 (52-73) | 50 (39-62) | 39 (29-50) | 29 (21-40) | 23 (15-32) | 18 (12-26) | 15 (9.5-22) | 13 (7.9-19) | 11 (6.7-17) | 9.8 (5.9-15) | 8.7 (5.2-14) |
| 4 | 76 (67-82) | 64 (54-72) | 52 (41-60) | 40 (31-49) | 31 (23-40) | 25 (18-33) | 20 (15-28) | 17 (13-25) | 15 (11-22) | 13 (9.3-19) | 12 (8.2-18) |
| 5 | 85 (80-88) | 77 (70-81) | 65 (58-70) | 53 (46-59) | 42 (36-48) | 33 (28-40) | 28 (23-34) | 23 (20-29) | 20 (17-26) | 17 (15-23) | 15 (13-21) |
| 6 | 90 | 85 | 78 | 67 | 55 | 44 | 37 | 31 | 27 | 23 | 20 |

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

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 | 28 | 21 | 16 | 12 | 9.2 | 7.6 | 6.4 | 5.5 | 4.7 | 4.1 | 3.7 |
| 1 | 41 (35-61) | 32 (26-48) | 24 (19-36) | 18 (14-27) | 14 (10-19) | 11 (8.3-15) | 9.0 (6.8-11) | 7.6 (5.6-9.0) | 6.5 (4.8-7.4) | 5.6 (4.1-6.5) | 4.9 (3.6-5.8) |
| 2 | 56 (44-75) | 45 (33-64) | 35 (25-52) | 27 (19-40) | 20 (14-30) | 16 (11-23) | 13 (8.6-18) | 11 (7.1-14) | 8.9 (5.9-12) | 7.5 (5.0-10) | 6.5 (4.3-9.0) |
| 3 | 70 (55-83) | 60 (43-75) | 49 (33-64) | 38 (25-52) | 29 (18-41) | 23 (14-32) | 18 (11-26) | 15 (9.3-21) | 12 (7.7-17) | 10 (6.5-14) | 8.7 (5.6-12) |
| 4 | 80 (67-87) | 73 (55-82) | 64 (44-74) | 52 (34-63) | 42 (26-51) | 33 (21-41) | 26 (17-33) | 21 (14-27) | 17 (12-22) | 14 (10-19) | 12 (8.7-16) |
| 5 | 87 (77-90) | 83 (69-87) | 76 (59-81) | 67 (48-73) | 56 (38-62) | 46 (31-51) | 37 (26-42) | 29 (21-34) | 24 (18-28) | 19 (15-23) | 16 (13-19) |
| 6 | 90 | 88 | 85 | 79 | 70 | 60 | 50 | 41 | 33 | 26 | 21 |

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 | 29 | 23 | 18 | 14 | 11 | 9.1 | 7.7 | 6.6 | 5.6 | 4.9 | 4.3 |
| 1 | 41 (34-59) | 33 (26-49) | 26 (20-39) | 20 (15-30) | 16 (12-23) | 13 (9.7-18) | 11 (8.0-14) | 9.0 (6.6-11) | 7.7 (5.6-9.2) | 6.5 (4.7-7.5) | 5.6 (4.1-6.5) |
| 2 | 54 (42-71) | 45 (33-62) | 36 (26-52) | 29 (20-42) | 23 (16-33) | 18 (13-27) | 15 (10-22) | 13 (8.4-17) | 10 (7.0-14) | 8.8 (5.9-12) | 7.5 (5.0-9.7) |
| 3 | 66 (51-78) | 57 (42-71) | 48 (34-63) | 39 (26-53) | 32 (21-43) | 26 (17-35) | 21 (13-29) | 17 (11-24) | 14 (9.2-20) | 12 (7.7-16) | 10 (6.5-14) |
| 4 | 75 (61-83) | 69 (52-78) | 61 (43-71) | 52 (34-62) | 43 (27-53) | 36 (23-44) | 29 (19-37) | 24 (16-30) | 20 (13-25) | 16 (11-21) | 14 (9.6-18) |
| 5 | 82 (70-86) | 78 (63-83) | 72 (54-77) | 64 (46-70) | 55 (38-62) | 47 (32-54) | 40 (27-46) | 33 (23-38) | 27 (19-32) | 22 (17-27) | 18 (14-22) |
| 6 | 86 | 84 | 80 | 75 | 68 | 60 | 52 | 44 | 36 | 30 | 25 |

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

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 | 27 | 22 | 18 | 14 | 12 | 10 | 8.6 | 7.4 | 6.3 | 5.5 | 4.7 |
| 1 | 37 (29-53) | 31 (24-45) | 25 (19-36) | 20 (15-29) | 17 (12-24) | 14 (10-19) | 12 (8.5-16) | 10 (7.2-13) | 8.6 (6.1-11) | 7.3 (5.2-8.9) | 6.3 (4.4-7.3) |
| 2 | 48 (37-63) | 41 (30-55) | 34 (24-47) | 28 (19-39) | 23 (16-33) | 19 (13-28) | 16 (11-23) | 14 (9.1-19) | 12 (7.7-16) | 9.9 (6.5-13) | 8.4 (5.5-11) |
| 3 | 59 (45-71) | 52 (38-65) | 44 (31-57) | 37 (25-49) | 31 (21-42) | 27 (17-36) | 22 (14-30) | 19 (12-26) | 16 (10-22) | 13 (8.5-18) | 11 (7.2-15) |
| 4 | 69 (54-77) | 62 (47-72) | 55 (39-65) | 48 (32-58) | 42 (27-51) | 36 (23-44) | 30 (20-38) | 26 (17-32) | 21 (14-28) | 18 (12-24) | 15 (10-20) |
| 5 | 76 (63-81) | 72 (56-77) | 66 (49-72) | 59 (42-66) | 53 (36-59) | 46 (31-53) | 40 (27-47) | 34 (23-40) | 29 (20-35) | 24 (17-30) | 20 (15-25) |
| 6 | 81 | 79 | 75 | 70 | 64 | 58 | 51 | 44 | 38 | 32 | 27 |

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 | 21 | 17 | 14 | 11 | 9.8 | 8.4 | 7.1 | 6.1 | 5.2 | 4.5 | 3.8 |
| 1 | 29 (22-42) | 24 (18-35) | 20 (14-29) | 16 (12-24) | 14 (9.8-20) | 12 (8.3-17) | 10 (7.0-14) | 8.5 (5.9-12) | 7.2 (5.0-9.7) | 6.1 (4.3-8.1) | 5.2 (3.6-6.7) |
| 2 | 39 (28-52) | 33 (23-45) | 27 (19-38) | 23 (15-32) | 19 (13-28) | 16 (11-24) | 14 (9.1-20) | 12 (7.7-17) | 10 (6.5-14) | 8.5 (5.5-12) | 7.2 (4.6-9.9) |
| 3 | 49 (35-61) | 42 (30-55) | 36 (24-48) | 31 (20-41) | 27 (17-36) | 23 (14-31) | 19 (12-26) | 16 (10-23) | 14 (8.6-19) | 12 (7.3-16) | 9.9 (6.1-14) |
| 4 | 59 (44-68) | 53 (37-63) | 46 (31-56) | 40 (26-50) | 35 (23-44) | 31 (20-39) | 26 (17-34) | 23 (14-29) | 19 (12-25) | 16 (10-21) | 14 (8.7-18) |
| 5 | 68 (53-73) | 63 (46-69) | 57 (40-64) | 51 (34-58) | 46 (30-53) | 41 (26-47) | 35 (23-42) | 31 (20-36) | 26 (17-32) | 22 (14-27) | 19 (12-23) |
| 6 | 74 | 71 | 67 | 62 | 57 | 51 | 46 | 40 | 35 | 30 | 26 |