

Netherlands - 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 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 Netherlands. 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 | 2.2 | 2.0 | 1.8 | 1.6 | 1.4 | 1.2 | 1.1 |
| 1 | 3.6 (2.5-5.5) | 3.2 (2.2-4.5) | 2.9 (2.0-4.1) | 2.5 (1.7-3.5) | 2.2 (1.5-3.1) | 1.9 (1.3-2.7) | 1.7 (1.1-2.3) |
| 2 | 5.9 (3.2-9.7) | 5.0 (2.7-8.4) | 4.5 (2.4-7.8) | 3.9 (2.1-6.8) | 3.4 (1.8-5.9) | 3.0 (1.6-5.2) | 2.6 (1.4-4.5) |
| 3 | 9.5 (4.8-16) | 7.9 (3.8-14) | 7.0 (3.3-13) | 6.0 (2.9-11) | 5.2 (2.5-9.7) | 4.6 (2.2-8.5) | 4.0 (1.9-7.4) |
| 4 | 15 (8.1-23) | 12 (6.7-19) | 11 (5.7-17) | 9.1 (4.9-15) | 7.9 (4.2-13) | 6.9 (3.6-11) | 6.0 (3.1-10) |
| 5 | 23 (14-29) | 18 (12-24) | 16 (10-21) | 14 (9.1-18) | 12 (7.9-16) | 10 (6.9-14) | 8.9 (6.0-12) |
| 6 | 35 | 27 | 23 | 20 | 17 | 15 | 13 |

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

Age = 55 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 3.0 | 2.6 | 2.4 | 2.1 | 1.8 | 1.6 | 1.4 |
| 1 | 5.0 (3.6-7.3) | 4.2 (2.9-5.9) | 3.8 (2.6-5.2) | 3.3 (2.3-4.5) | 2.9 (2.0-3.9) | 2.5 (1.7-3.4) | 2.2 (1.5-2.9) |
| 2 | 8.1 (4.7-13) | 6.7 (3.7-11) | 5.9 (3.2-9.8) | 5.1 (2.8-8.5) | 4.4 (2.4-7.4) | 3.8 (2.1-6.5) | 3.3 (1.8-5.7) |
| 3 | 13 (7.1-21) | 10 (5.4-18) | 9.0 (4.5-16) | 7.8 (3.9-14) | 6.7 (3.3-12) | 5.8 (2.9-11) | 5.1 (2.5-9.2) |
| 4 | 20 (11-30) | 16 (9.5-24) | 14 (7.8-21) | 12 (6.6-19) | 10 (5.7-16) | 8.8 (4.9-14) | 7.6 (4.2-12) |
| 5 | 31 (20-38) | 24 (16-30) | 20 (14-26) | 17 (12-23) | 15 (10-20) | 13 (9.0-17) | 11 (7.8-15) |
| 6 | 45 | 35 | 29 | 25 | 22 | 19 | 16 |

Age = 60 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 4.6 | 3.8 | 3.4 | 3.0 | 2.6 | 2.2 | 1.9 |
| 1 | 7.4 (5.4-10) | 6.1 (4.3-8.3) | 5.3 (3.7-7.1) | 4.6 (3.2-6.1) | 4.0 (2.8-5.3) | 3.5 (2.4-4.6) | 3.0 (2.1-4.0) |
| 2 | 12 (7.3-18) | 9.5 (5.6-14) | 8.2 (4.7-13) | 7.1 (4.0-11) | 6.1 (3.4-10) | 5.3 (3.0-8.7) | 4.6 (2.5-7.6) |
| 3 | 19 (11-28) | 15 (8.3-24) | 13 (6.7-21) | 11 (5.7-18) | 9.3 (4.9-16) | 8.0 (4.2-14) | 7.0 (3.6-12) |
| 4 | 28 (17-39) | 22 (14-32) | 19 (12-28) | 16 (9.8-25) | 14 (8.3-22) | 12 (7.1-19) | 10 (6.0-17) |
| 5 | 41 (29-49) | 33 (23-40) | 27 (20-34) | 23 (17-30) | 20 (15-26) | 18 (13-23) | 15 (11-20) |
| 6 | 57 | 46 | 38 | 34 | 29 | 25 | 22 |

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

Age = 65 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|--------------|---------------|---------------|---------------|---------------|---------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 6.8 | 5.5 | 4.8 | 4.2 | 3.6 | 3.1 | 2.7 |
| 1 | 11 (8.2-14) | 8.7 (6.4-11) | 7.5 (5.4-9.6) | 6.4 (4.6-8.3) | 5.5 (3.9-7.1) | 4.8 (3.4-6.1) | 4.1 (2.9-5.3) |
| 2 | 17 (11-24) | 13 (8.4-19) | 11 (6.8-17) | 9.8 (5.8-15) | 8.4 (4.9-13) | 7.3 (4.2-12) | 6.3 (3.6-10) |
| 3 | 26 (17-36) | 20 (13-31) | 17 (9.8-27) | 15 (8.3-24) | 13 (7.0-21) | 11 (6.0-18) | 9.4 (5.1-16) |
| 4 | 37 (25-49) | 30 (20-42) | 25 (17-36) | 22 (14-32) | 19 (12-28) | 16 (10-25) | 14 (8.6-21) |
| 5 | 52 (41-60) | 42 (33-51) | 35 (27-44) | 31 (23-39) | 27 (20-34) | 23 (17-30) | 20 (15-26) |
| 6 | 67 | 57 | 49 | 43 | 37 | 33 | 28 |

Age = 70 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|-------------|-------------|--------------|---------------|---------------|---------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 10 | 8.1 | 6.9 | 5.9 | 5.0 | 4.3 | 3.7 |
| 1 | 16 (12-19) | 12 (9.4-15) | 10 (7.7-13) | 8.8 (6.6-11) | 7.5 (5.6-9.6) | 6.4 (4.7-8.2) | 5.5 (4.0-7.1) |
| 2 | 25 (17-33) | 19 (13-25) | 15 (9.9-21) | 13 (8.4-18) | 11 (7.1-16) | 9.5 (6.0-13) | 8.1 (5.1-11) |
| 3 | 37 (26-50) | 29 (19-40) | 23 (15-33) | 19 (12-29) | 16 (10-25) | 14 (8.7-21) | 12 (7.3-18) |
| 4 | 52 (41-65) | 42 (31-55) | 33 (25-46) | 28 (21-40) | 24 (17-34) | 21 (15-30) | 17 (12-25) |
| 5 | 67 (62-75) | 57 (51-66) | 47 (40-56) | 41 (34-49) | 35 (29-43) | 30 (24-37) | 25 (20-32) |
| 6 | 80 | 73 | 63 | 56 | 49 | 42 | 36 |

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

Age = 75 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|------------|------------|-------------|-------------|--------------|---------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 14 | 12 | 9.7 | 8.2 | 7.0 | 5.9 | 5.1 |
| 1 | 23 (17-33) | 18 (14-24) | 15 (11-18) | 12 (9.2-15) | 10 (7.8-12) | 8.8 (6.5-11) | 7.4 (5.5-9.1) |
| 2 | 35 (23-50) | 28 (18-39) | 22 (14-30) | 19 (12-25) | 16 (10-21) | 13 (8.4-17) | 11 (7.0-14) |
| 3 | 50 (35-66) | 42 (27-57) | 33 (21-46) | 28 (18-40) | 23 (15-34) | 20 (12-28) | 16 (10-24) |
| 4 | 65 (49-77) | 57 (42-72) | 48 (34-62) | 41 (29-55) | 35 (24-47) | 29 (20-41) | 25 (17-34) |
| 5 | 76 (65-83) | 72 (59-80) | 64 (52-73) | 57 (45-66) | 49 (39-59) | 42 (33-51) | 36 (28-44) |
| 6 | 84 | 83 | 79 | 73 | 66 | 58 | 51 |

Age = 80 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|------------|------------|------------|-------------|-------------|--------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 18 | 15 | 12 | 10 | 8.7 | 7.4 | 6.2 |
| 1 | 28 (21-40) | 23 (17-32) | 19 (14-24) | 16 (12-20) | 13 (9.7-16) | 11 (8.1-13) | 9.1 (6.7-11) |
| 2 | 40 (28-55) | 34 (23-46) | 28 (19-38) | 23 (15-32) | 19 (13-26) | 16 (11-22) | 13 (8.7-18) |
| 3 | 53 (38-67) | 47 (34-61) | 40 (28-53) | 34 (23-46) | 29 (19-39) | 24 (16-32) | 20 (13-27) |
| 4 | 65 (50-75) | 61 (46-72) | 54 (40-67) | 47 (34-60) | 40 (29-53) | 34 (24-46) | 29 (20-39) |
| 5 | 74 (62-80) | 72 (59-79) | 68 (55-76) | 61 (48-70) | 54 (42-63) | 47 (36-56) | 40 (30-49) |
| 6 | 81 | 80 | 78 | 74 | 68 | 61 | 54 |

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

Age = 85 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|------------|------------|------------|------------|-------------|--------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 18 | 16 | 14 | 12 | 9.6 | 8.0 | 6.7 |
| 1 | 28 (21-41) | 24 (18-35) | 21 (16-28) | 17 (13-23) | 14 (10-19) | 12 (8.6-15) | 9.8 (7.0-12) |
| 2 | 40 (28-55) | 35 (24-49) | 30 (21-41) | 25 (17-34) | 21 (14-28) | 17 (11-23) | 14 (9.3-19) |
| 3 | 52 (37-66) | 48 (33-62) | 42 (30-55) | 36 (25-48) | 30 (20-41) | 25 (17-34) | 21 (14-29) |
| 4 | 63 (48-74) | 60 (45-71) | 56 (42-68) | 49 (35-61) | 42 (30-54) | 36 (25-47) | 30 (20-40) |
| 5 | 72 (61-78) | 71 (58-77) | 68 (55-75) | 62 (48-70) | 55 (42-64) | 48 (35-57) | 41 (30-50) |
| 6 | 78 | 78 | 77 | 73 | 67 | 61 | 54 |

Age = 90 years

| Number of CRFs | BMI (kg/m ²) | | | | | | |
|----------------|--------------------------|------------|------------|------------|-------------|-------------|--------------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 0 | 15 | 14 | 13 | 11 | 9.0 | 7.5 | 6.2 |
| 1 | 23 (17-35) | 21 (15-31) | 19 (14-26) | 16 (11-21) | 13 (9.3-17) | 11 (7.6-14) | 8.9 (6.2-11) |
| 2 | 34 (23-49) | 30 (20-44) | 28 (19-38) | 23 (15-32) | 19 (12-26) | 16 (10-22) | 13 (8.1-18) |
| 3 | 45 (31-60) | 42 (28-56) | 38 (26-51) | 32 (21-44) | 27 (17-37) | 22 (14-31) | 18 (11-26) |
| 4 | 57 (41-68) | 54 (38-65) | 50 (36-62) | 44 (31-55) | 37 (25-48) | 31 (21-42) | 26 (17-35) |
| 5 | 66 (54-73) | 65 (51-72) | 62 (49-70) | 55 (42-64) | 49 (36-58) | 42 (30-51) | 36 (25-44) |
| 6 | 72 | 73 | 72 | 67 | 61 | 54 | 47 |