## WHO cardiovascular disease risk laboratory-based charts

## Southeast Asia

Indonesia, Cambodia, Lao PDR, Sri Lanka, Maldives, Myanmar, Malaysia, Philippines, Thailand, Timor-Leste, Viet Nam, Mauritius, Seychelles.

| Property Column   Property C   | Risk Level                     |                                      |                               |  |           | Risk Level <5% 5% to <10% 10% to <20% 20% to <30% ≥30% |                            |  |   |                                  |                |  |
|--|--------------------------------|--------------------------------------|-------------------------------|--|-----------|--|----------------------------|--|---|----------------------------------|----------------|--|
| No.    | People without Diabetes        |                                      |                               |  |           |  | People with Diabetes       |  |   |                                  |                |  |
| 1  |                                |                                      |                               |  |           |  |                            |  |   |                                  | _              |  |
| 1  | V /                            |                                      |                               | 26 27 28 30 31 ≥ <sup>18</sup>         | Hg)<br>80 |  |                            |  |   |                                  | (mmHg)<br>≥180 |  |
| 1  | 19 21 23 26 2                  | 25 27 30 33 37                       | 16 16 17 18 18                |  |           | 27   | 29 32 36 40                |  | 23 25 26 27 28  |                                  |                |  |
| 1  |                                |                                      |                               |  |           |  | 24 26 29 33                |  | 20 21 22 23 24  | 28 29 31 32 34                   |                |  |
|  |                                | 9 16 18 20 22 25<br>5 13 15 16 18 20 |                               |  |           | 17   | 19 22 24 27<br>16 17 19 22 | 23   25   28   <b>31   35</b>   18   20   23   25   29 | 17     17     18     19     20       14     15     15     16     17 | 23 25 26 27 29<br>20 21 22 23 24 |                |  |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $  |                                |                                      | 7 7 10 10 11                  |  |           |  | 10 17 17 22                | 10 20 20 25 27   |   | 20 2. 22 20 2.                   | _              |  |
| S  | 19 20 22 25 2<br>15 16 19 30 3 |                                      |                               |  |           | 27   |                            |  | 23 24 25 27 28  |                                  |                |  |
| 1  | 65-69 11 13 14 16 1            |                                      |                               |  |           | 65-69 17   |                            |  | 17 20 21 22 21  |                                  |                |  |
|  | 9 10 11 12 1                   | 12 14 15 17 20                       | 8 8 9 9 10                    | 12 13 13 14 15 120-                    | 139       | 13   | 15 17 19 21                | 19 21 23 26 30   | 13 13 14 15 16  | 20 21 22 24 25                   | 120-139        |  |
|  | 7 8 9 10 1                     | 1 10 11 12 14 16                     | 6 7 7 7 8                     | 10 10 11 12 12 <12                     | 20        | 10   | 12   13   15   17          | 15 16 19 21 24   | 10 11 12 12 13  | 16 17 18 19 21                   | <120           |  |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $   | 14 16 17 19 2                  | 21 23 26 29 33                       | 11 11 12 13 14                | 18 19 20 21 23 ≥ <sup>18</sup>         | 80        | 22   | 25 27 31 35                | 32 35 40 44 50   | 19 20 21 22 24  | 30 32 34 37 40                   | ≥180           |  |
| S  | 11 12 10 10 1                  | . 10 10 20 20 20                     |                               |  |           | 17   | 19 21 24 28                |  |   | 25 26 28 31 33<br>33 31 33 35 37 |                |  |
| S   S   O   V   S   S   O   V   S   V   O   O   O   O   O   O   O   O   O  |                                |                                      |                               |  |           |  |                            |  |   | 16 17 19 20 22                   |                |  |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  | 5 5 6 7 8                      | 7 8 9 10 12                          |                               |  |           | 8  | 9 10 11 13                 | 12 13 15 17 20   | 8 8 9 9 10  | 13 14 15 16 18                   |                |  |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  | 11 12 13 15 1                  | 7 17 19 21 24 28                     | 8 9 9 10 11                   | 15 16 17 18 20 ≥ <sup>18</sup>         | 80        | 18   | 20 23 26 30                | 28 31 35 40 46   | 15 16 17 19 20  | 27 29 31 34 37                   | ≥180           |  |
|  | 8 9 10 11 1                    | 3 14 16 18 21                        | 6 7 7 8 8                     | 11 12 13 14 16 160-                    | 179       | 14   | 15 17 20 23                |  | 12 13 14 15 16  | 21 23 25 27 30                   | 160-179        |  |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                                |                                      |                               |  |           | 55-59 10   |                            | 16 19 21 25 29   |   | 17 18 20 22 24<br>18 15 16 17 18 |                |  |
| 50.54  |                                |                                      | 3 3 3 4 4                     |  |           | 6  |                            |  |   | 10 11 13 14 15                   |                |  |
| 50.54  |                                |                                      |                               | .18                                    | an l      | 45   | 43 40 00 05                |  |   |                                  | <b>-</b> 180   |  |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  |                                |                                      |                               |  |           | 15   | 17 19 22 25<br>13 14 16 19 |  | 9 10 11 12 13   |                                  |                |  |
| 2   3   3   3   4   4   4   5   6   7   2   2   2   3   3   4   4   5   5   6   6   7   7   8   9   10   12   14   4   5   5   5   6   6   7   7   8   9   10   12   14   4   5   5   5   6   6   7   7   8   9   10   12   14   4   5   5   5   6   6   7   7   8   9   10   12   14   4   5   5   5   6   6   7   7   8   9   10   12   14   4   5   5   5   6   6   7   7   8   9   10   11   12   13   14   15   15   15   15   15   15   15   | 50-54 4 5 6 6 7                | 7 8 10 11 13                         | 4 4 4 5 5                     | 7 8 8 9 10 140-                        | 159       | 50-54 8  | 9 10 12 14                 | 14 16 18 21 25   | 7 8 9 9 10  | 14 16 17 19 21                   | 140-159        |  |
| 45-49  |                                |                                      |                               |  |           | 6  |                            |  |   |                                  |                |  |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  | 2 3 3 3 2                      | 4 4 5 6 7                            | 2 2 2 3 3                     |  |           | 4  | 5 6 6 8                    | 7 8 10 12 14   | 4 5 5 5 6   | 8 9 10 12 13                     | -              |  |
| 45-49 3 4 4 5 5 5 6 6 7 7 8 140-159 2 2 2 2 2 3 3 3 4 4 5 5 6 6 7 7 8 10 11 12 13 15 18 22 6 6 6 7 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 2 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 3 3 3 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 2 3 3 3 4 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 2 3 3 3 4 4 4 5 5 6 7 8 9 10 11 13 15 17 19 140-159 1 |                                | 11 13 14 17 20                       |                               |  |           | 13   | 14 16 18 21                |  | 10 11 12 13 15  |                                  |                |  |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  |                                |                                      |                               |  |           | ,  |                            | 10 10 21 21 27   |   |                                  |                |  |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | 2 3 3 3 4                      | 4 5 5 6 8                            | 2 2 2 2 3                     | 4 4 5 6 6 120-                         | 139       | 5  | 5 6 7 8                    | 8 9 11 13 16   | 4 5 5 6 6   | 9 10 11 13 15                    | 120-139        |  |
| 4 4 4 5 6 7 8 10 12 3 3 3 4 6 7 8 9 160-179 40-44 2 3 3 3 3 4 5 6 7 8 10 12 3 3 3 3 4 5 6 7 8 10 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 2 2 2 2 3                      | 3 3 4 4 5                            | 1 2 2 2 2                     | 3 3 4 4 5 <12                          | 20        | 3  | 4 4 5 6                    | 6 7 8 10 12  | 3 3 4 4 5   | 7 8 9 10 11                      | <120           |  |
| 40-44 2 3 3 3 4 4 5 6 7 8 2 2 2 3 3 3 4 4 5 6 7 8 2 2 2 2 3 3 3 4 4 5 6 7 8 9 4 5 6 7 8 9 4 5 6 7 8 9 4 5 6 7 8 9 4 5 6 7 8 9 4 9 10 11 13 15 19 4 5 5 6 7 8 10 11 13 15 17 140-159 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 5 6 6 7 8                      | 9 10 12 14 17                        | 4 4 4 5 5                     |  |           | 11   | 12 13 15 18                | 19 22 25 29 35   | 8 9 10 11 12  | 18 20 23 26 29                   |                |  |
| 2 2 2 3 3 3 4 5 6 1 1 2 2 2 3 3 3 4 5 6 1 1 1 2 2 2 3 3 3 4 5 6 7 8 9 11 14 3 3 3 4 5 6 7 8 9 11 14 3 3 3 4 4 5 6 7 8 9 11 14 3 3 3 4 4 5 6 7 8 9 11 14 14 15 15 6 7 8 9 11 14 15 15 15 6 7 8 9 11 14 15 15 15 15 15 15 15 15 15 15 15 15 15   |                                |                                      |                               |  |           | 7  |                            |  |   |                                  |                |  |
| 1 1 1 2 2 2 2 3 3 4 1 1 1 1 1 2 3 3 3 4 4 5 5 5 6 8 10 2 3 3 3 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6   |                                |                                      |                               |  |           | 40-44 5  |                            |  |   |                                  |                |  |
|  | 1 1 1 2 2                      | 2 2 3 3 4                            | 1 1 1 1 1                     | 2 3 3 3 4 <12                          |           | 2  | 3 3 4 4                    |  | 2 3 3 3 4   | 5 6 7 8 9                        | <120           |  |
|  | <4<br>1-4.9<br>3-5.9<br>1-6.9  | <4<br>1-4.9<br>5-5.9<br>5-6.9        | <4<br>1-4.9<br>1-5.9<br>1-6.9 | <4<br>1-4.9<br>5-5.9<br>5-6.9<br>5-5.7 |           | 4,   | 1-4.9<br>5-5.9<br>5-6.9    | <4<br>1-4.9<br>1-5.9<br>1-6.9<br>1-6.9                 | <4<br>1-4.9<br>1-5.9<br>1-6.9<br>1-6.9                              | <4<br>1-4.9<br>3-5.9<br>3-6.9    |                |  |
|  |                                |                                      |                               |  |           |  |                            |  |   |                                  |                |  |

## WHO cardiovascular disease risk non-laboratory-based charts

## Southeast Asia

Indonesia, Cambodia, Lao PDR, Sri Lanka, Maldives, Myanmar, Malaysia, Philippines, Thailand, Timor-Leste, Viet Nam, Mauritius, Seychelles.

| Risk Le                         | vel                                     | <5%           | 5% to <10                               | )%             | 10% to <20     | )%               | 20%  | to <30%        | ≥30%   | )                        |
|---------------------------------|---|---------------|---|----------------|----------------|------------------|------|----------------|--------|--------------------------|
| Non-laboratory based risk chart |   |               |   |                |                |                  |      |                |        |                          |
| Age                             |   | M             |   | SBP            |                |                  |      |                |        |                          |
| (years)                         | Non-sm                                  |               | Smoke                                   |                |                | on-smoke         |      |                | Smoker | (mmHg)                   |
|                                 | 26 28 30                                |               | 34 36 39<br>28 30 32                    | 41 44          | 21 22<br>17 18 | 2 22 2<br>3 19 1 | 3 24 | 30 31          | 32 33  | 34 ≥180                  |
| 70-74                           | 21 23 25<br>17 19 20                    | 26 28         | 23 24 26                                | 34 36<br>28 30 | 15 15          |                  |      | 25 26<br>21 22 | 27 28  | 29 160-179<br>24 140-159 |
| 70-74                           | 17     19     20       14     15     16 |               | 23     24     26       18     20     21 | 28 30          | 12 12          |                  | _    | 17 18          | 19 19  | 20 120-139               |
|                                 | 11 12 13                                |               | 15 16 17                                | 18 20          | 10 10          |                  | _    | 14 15          | 15 16  | 17 <120                  |
|                                 | 11 12 10                                |               | 10 10 17                                | 10 20          | .0             |                  |      |                | 10 10  |                          |
|                                 | 20 22 24                                | 26 28         | 28 30 33                                | 36 39          | 16 17          | 18 1             | 8 19 | 25 26          | 27 29  | 30 ≥180                  |
|                                 | 16 17 19                                | 21 22         | 22 24 26                                | 29 31          | 13 14          | 1 14 1           | 5 15 | 21 22          | 22 23  | 24 160-179               |
| 65-69                           | 12 14 15                                | 16 18         | 18 19 21                                | 23 25          | 11 11          |                  | 2 12 | 17 18          | 18 19  | 20 140-159               |
|                                 | 10 11 12                                | 13 14         | 14 15 16                                | 18 20          | 9 9            |                  | 0 10 | 14 14          | 15 15  | 16 120-139               |
|                                 | 8 8 9                                   | 10 11         | 11 12 13                                | 14 16          | 7 7            | 7                | 8    | 11 11          | 12 12  | <120                     |
|                                 | 15 17 19                                | 21 23         | 23 25 28                                | 31 34          | 13 13          | 3 14 1           | 4 15 | 21 22          | 23 25  | <mark>26 ≥</mark> 180    |
|                                 | 12 13 14                                |               | 18 20 22                                | 24 27          | 10 10          |                  | _    | 17 18          | 19 20  | 21 160-179               |
| 60-64                           | 9 10 11                                 | 12 14         | 14 15 17                                | 19 21          | 8 8            | 8                | 9    | 13 14          | 15 16  | 16 140-159               |
|                                 | 7 8 8                                   | 9 10          | 10 12 13                                | 14 16          | 6 6            | 7                | 7    | 11 11          | 12 12  | 13 120-139               |
|                                 | 5 6 6                                   | 7 8           | 8 9 10                                  | 11 12          | 5 5            | 5                | 6    | 8 9            | 9 10   | 10 <120                  |
|                                 | 12 13 15                                | 16 18         | 19 21 24                                | 27 30          | 10 10          | ) 11 1           | 1 12 | 18 19          | 20 21  | 22 ≥180                  |
|                                 | 9 10 11                                 | 12 14         | 19     21     24       14     16     18 | 20 23          | 8 8            |                  | _    | 14 15          | 15 16  | 17 160-179               |
| 55-59                           | 7 7 8                                   | 9 10          | 11 12 13                                | 15 17          | 6 6            |                  | _    | 11 11          | 12 13  | 13 140-159               |
| 0007                            | 5 5 6                                   | 7 8           | 8 9 10                                  | 11 13          | 4 5            |                  |      | 8 9            | 9 10   | 10 120-139               |
|                                 | 4 4 4                                   | 5 6           | 6 7 7                                   | 8 10           | 3 3            | 4                |      | 6 7            | 7 7    | 8 <120                   |
|                                 |   |               |   |                |                |                  |      |                |        |                          |
|                                 | 9 10 11                                 | 13 15         | 15 18 20                                | 23 27          | 8 8            | 8 (              | 9    | 15 16          | 17 18  | 19 ≥180                  |
|                                 | 7 7 8                                   | 9 11          | 11 13 15                                | 17 20          | 6 6            |                  |      | 11 12          | 13 14  | 14 160-179               |
| 50-54                           | 5 5 6                                   | 7 8           | 8 9 11                                  | 12 14          | 4 4            |                  |      | 9 9            | 10 10  | 11 140-159               |
|                                 | 3 4 4                                   | 5 6           | 6 7 8                                   | 9 11           | 3 3            | 3 4              |      | 6 7            | 7 8    | 8 120-139                |
|                                 | 2 3 3                                   | 4 4           | 4 5 6                                   | 7 8            | 2 2            | 3                | 3    | 5 5            | 5 6    | 6 <120                   |
|                                 | 7 8 9                                   | 10 12         | 13 15 17                                | 20 23          | 6 6            | 7                | 7    | 13 14          | 14 15  | 16 ≥180                  |
|                                 | 5 6 6                                   | 7 8           | 9 10 12                                 | 14 17          | 4 5            | 5                | 5    | 9 10           | 11 11  | 12 160-179               |
| 45-49                           | 3 4 4                                   | 5 6           | 6 7 9                                   | 10 12          | 3 3            | 3 4              | 4    | 7 7            | 8 8    | 9 140-159                |
|                                 | 2 3 3                                   | 4 4           | 4 5 6                                   | 7 8            | 2 2            | 2                | 3    | 5 5            | 6 6    | 6 120-139                |
|                                 | 2 2 2                                   | 2 3           | 3 4 4                                   | 5 6            | 2 2            | 2                | 2 2  | 4 4            | 4 4    | 5 <120                   |
|                                 | 5 6 7                                   | 8 10          | 10 12 14                                | 17 20          | 5 5            | 5                | 6    | 11 11          | 12 13  | 14 ≥180                  |
| 1                               | 4 4 5                                   | 6 7           | 7 8 10                                  | 12 14          | 3 3            | 4                |      | 8 8            | 9 9    | 10 160-179               |
| 40-44                           | 2 3 3                                   | 4 4           | 5 6 7                                   | 8 10           | 2 2            | 3                |      | 5 6            | 6 7    | 7 140-159                |
|                                 | 2 2 2                                   | 3 3           | 3 4 5                                   | 6 7            | 2 2            | 2                | _    | 4 4            | 4 5    | 5 120-139                |
| 1                               | 1 1 2                                   | 2 2           | 2 3 3                                   | 4 5            | 1 1            | 1                | 1    | 3 3            | 3 3    | 4 <120                   |
| 1                               | <20<br>20-24<br>25-29                   | 30-35<br>≥ 35 | <20<br>20-24<br>25-29                   | 30-35<br>≥ 35  | <20            | 25-29            | 35   | <20<br>20-24   | 25-29  | 35                       |
|                                 | <,<br>20-<br>25-                        | 30-           |   |                |                |                  | S VI | <,<br>20-      | 25-    | ΛI                       |
| Body mass index (kg/m^2)        |   |               |   |                |                |                  |      |                |        |                          |

Southeast Asia