**Supplementary File 1. Cost per DALY averted for each method and percent of GDP per capita (2015 US$)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Country | DALY 1 | DALY 2 | DALY 3 | DALY 4 |
| Albania | $3,259  | 83% | $2,087  | 53% | $3,338  | 85% | $2,761  | 70% |
| Algeria | $4,646  | 110% | $4,086  | 97% | $6,485  | 154% | $5,475  | 130% |
| Argentina | $6,794  | 51% | $4,936  | 37% | $7,469  | 56% | $6,582  | 49% |
| Armenia | $1,312  | 38% | $954  | 27% | $1,422  | 41% | $1,268  | 36% |
| Azerbaijan | $1,599  | 29% | $1,345  | 24% | $1,954  | 36% | $1,794  | 33% |
| Bangladesh | $132  | 11% | $114  | 9% | $165  | 14% | $151  | 12% |
| Belarus | $4,967  | 87% | $3,113  | 54% | $4,225  | 74% | $4,074  | 71% |
| Belize | $4,808  | 99% | $2,935  | 60% | $4,378  | 90% | $3,879  | 80% |
| Benin | $200  | 26% | $171  | 22% | $202  | 26% | $223  | 29% |
| Bolivia | $2,505  | 81% | $2,106  | 68% | $3,053  | 99% | $2,799  | 91% |
| Botswana | $3,411  | 54% | $2,097  | 33% | $2,629  | 41% | $2,702  | 42% |
| Brazil | $8,397  | 98% | $6,048  | 71% | $9,318  | 109% | $8,047  | 94% |
| Bulgaria | $5,952  | 85% | $4,067  | 58% | $5,787  | 83% | $5,339  | 76% |
| Burkina Faso | $138  | 23% | $139  | 24% | $155  | 26% | $182  | 31% |
| Burundi | $107  | 38% | $99  | 36% | $113  | 41% | $131  | 47% |
| Cambodia | $276  | 24% | $189  | 16% | $262  | 23% | $248  | 21% |
| Cameroon | $112  | 9% | $107  | 9% | $123  | 10% | $140  | 12% |
| Cape Verde | $2,490  | 81% | $1,938  | 63% | $2,843  | 92% | $2,579  | 84% |
| Chad | $124  | 16% | $127  | 16% | $139  | 18% | $165  | 21% |
| China | $5,076  | 63% | $3,650  | 45% | $5,669  | 71% | $4,896  | 61% |
| Colombia | $9,555  | 158% | $7,067  | 117% | $11,459  | 189% | $9,484  | 157% |
| Comoros | $240  | 33% | $233  | 33% | $307  | 43% | $311  | 43% |
| Congo | $1,366  | 74% | $1,235  | 67% | $1,537  | 83% | $1,613  | 87% |
| Costa Rica | $18,262  | 162% | $12,473  | 111% | $21,327  | 189% | $16,739  | 149% |
| Cote d'Ivoire | $214  | 15% | $205  | 15% | $236  | 17% | $268  | 19% |
| Democratic Republic of the Congo | $54  | 12% | $54  | 12% | $64  | 14% | $69  | 15% |
| Dominican Republic | $4,045  | 63% | $2,731  | 42% | $4,005  | 62% | $3,594  | 56% |
| Ecuador | $5,796  | 93% | $4,479  | 72% | $6,965  | 112% | $5,991  | 97% |
| Egypt | $1,194  | 33% | $977  | 27% | $1,474  | 41% | $1,301  | 36% |
| El Salvador | $3,832  | 91% | $2,573  | 61% | $3,753  | 89% | $3,424  | 81% |
| Eritrea | $120  | 22% | $112  | 21% | $137  | 25% | $147  | 27% |
| Ethiopia | $176  | 28% | $167  | 27% | $206  | 33% | $221  | 36% |
| Gabon | $2,756  | 33% | $2,275  | 28% | $3,047  | 37% | $2,955  | 36% |
| Georgia | $1,044  | 27% | $743  | 20% | $1,032  | 27% | $981  | 26% |
| Ghana | $411  | 30% | $371  | 27% | $460  | 34% | $491  | 36% |
| Guatemala | $1,473  | 38% | $1,226  | 31% | $1,726  | 44% | $1,638  | 42% |
| Guinea | $115  | 22% | $111  | 21% | $126  | 24% | $145  | 27% |
| Guinea-Bissau | $55  | 10% | $52  | 9% | $58  | 10% | $68  | 12% |
| Guyana | $2,130  | 52% | $1,566  | 38% | $2,147  | 52% | $2,067  | 50% |
| Haiti | $190  | 23% | $133  | 16% | $170  | 21% | $172  | 21% |
| Honduras | $2,242  | 89% | $1,707  | 68% | $2,530  | 100% | $2,282  | 90% |
| India | $291  | 18% | $264  | 17% | $363  | 23% | $349  | 22% |
| Indonesia | $691  | 21% | $535  | 16% | $778  | 23% | $714  | 21% |
| Jamaica | $2,466  | 47% | $2,137  | 41% | $3,270  | 63% | $2,868  | 55% |
| Jordan | $6,162  | 125% | $4,917  | 100% | $8,771  | 178% | $6,618  | 134% |
| Kazakhstan | $5,809  | 55% | $3,734  | 36% | $5,213  | 50% | $4,917  | 47% |
| Kenya | $542  | 39% | $491  | 36% | $623  | 45% | $647  | 47% |
| Kyrgyzstan | $973  | 88% | $644  | 58% | $883  | 80% | $847  | 77% |
| Lebanon | $6,018  | 75% | $4,704  | 58% | $9,105  | 113% | $6,363  | 79% |
| Lesotho | $704  | 66% | $556  | 52% | $629  | 59% | $718  | 67% |
| Macedonia | $6,335  | 131% | $3,373  | 70% | $5,261  | 108% | $4,429  | 91% |
| Madagascar | $70  | 17% | $66  | 16% | $82  | 20% | $87  | 22% |
| Malawi | $130  | 35% | $124  | 33% | $142  | 38% | $164  | 44% |
| Malaysia | $6,875  | 70% | $4,396  | 45% | $7,314  | 75% | $5,898  | 60% |
| Mali | $69  | 10% | $71  | 10% | $77  | 11% | $93  | 13% |
| Mauritania | $279  | 20% | $272  | 20% | $356  | 26% | $360  | 26% |
| Mauritius | $4,653  | 50% | $3,560  | 38% | $5,442  | 59% | $4,776  | 52% |
| Mexico | $7,449  | 83% | $5,723  | 64% | $8,730  | 97% | $7,700  | 86% |
| Moldova | $2,314  | 125% | $1,570  | 85% | $2,353  | 127% | $2,084  | 113% |
| Mongolia | $1,949  | 49% | $1,394  | 35% | $1,865  | 47% | $1,848  | 47% |
| Morocco | $1,119  | 39% | $927  | 32% | $1,484  | 52% | $1,235  | 43% |
| Mozambique | $231  | 44% | $189  | 36% | $217  | 41% | $244  | 46% |
| Namibia | $5,014  | 107% | $3,142  | 67% | $3,948  | 84% | $4,061  | 87% |
| Nepal | $256  | 34% | $206  | 28% | $291  | 39% | $272  | 37% |
| Nicaragua | $3,674  | 176% | $1,830  | 88% | $2,840  | 136% | $2,403  | 115% |
| Niger | $88  | 25% | $90  | 25% | $98  | 27% | $118  | 33% |
| Nigeria | $214  | 8% | $223  | 8% | $254  | 10% | $291  | 11% |
| Pakistan | $138  | 10% | $133  | 9% | $169  | 12% | $175  | 12% |
| Panama | $14,446  | 109% | $11,003  | 83% | $17,101  | 129% | $14,711  | 111% |
| Paraguay | $5,797  | 142% | $3,401  | 83% | $5,199  | 127% | $4,467  | 109% |
| Peru | $4,756  | 79% | $3,836  | 64% | $6,531  | 108% | $5,163  | 86% |
| Philippines | $822  | 28% | $672  | 23% | $987  | 34% | $898  | 31% |
| Romania | $7,838  | 87% | $5,382  | 60% | $7,782  | 87% | $7,104  | 79% |
| Russia | $7,424  | 82% | $4,640  | 51% | $6,350  | 70% | $6,031  | 66% |
| Rwanda | $240  | 34% | $211  | 30% | $258  | 37% | $277  | 40% |
| Senegal | $352  | 39% | $284  | 32% | $351  | 39% | $371  | 41% |
| Sierra Leone | $108  | 17% | $105  | 16% | $116  | 18% | $137  | 21% |
| South Africa | $3,334  | 58% | $2,480  | 43% | $3,103  | 54% | $3,224  | 56% |
| Sri Lanka | $1,642  | 42% | $1,281  | 33% | $2,090  | 53% | $1,734  | 44% |
| Sudan | $315  | 13% | $302  | 12% | $389  | 16% | $398  | 16% |
| Swaziland | $2,351  | 73% | $1,505  | 47% | $1,773  | 55% | $1,923  | 60% |
| Tajikistan | $362  | 39% | $323  | 35% | $449  | 48% | $432  | 47% |
| Tanzania | $248  | 28% | $231  | 26% | $278  | 32% | $305  | 35% |
| Thailand | $6,507  | 112% | $4,069  | 70% | $6,006  | 103% | $5,388  | 93% |
| The Gambia | $266  | 56% | $247  | 52% | $312  | 66% | $326  | 69% |
| Togo | $130  | 23% | $117  | 21% | $136  | 24% | $153  | 27% |
| Tunisia | $3,553  | 92% | $2,763  | 71% | $4,730  | 122% | $3,706  | 96% |
| Turkey | $9,104  | 100% | $7,446  | 82% | $13,032  | 143% | $10,028  | 110% |
| Turkmenistan | $1,971  | 30% | $1,636  | 25% | $2,230  | 33% | $2,181  | 33% |
| Uganda | $129  | 18% | $117  | 17% | $136  | 19% | $154  | 22% |
| Ukraine | $1,626  | 77% | $1,059  | 50% | $1,439  | 68% | $1,383  | 65% |
| Uzbekistan | $1,218  | 57% | $985  | 46% | $1,426  | 67% | $1,318  | 62% |
| Venezuela | $4,886  | 40% | $3,618  | 29% | $5,540  | 45% | $4,821  | 39% |
| Vietnam | $1,725  | 82% | $1,198  | 57% | $1,813  | 86% | $1,602  | 76% |
| Yemen | $219  | 16% | $202  | 14% | $260  | 19% | $267  | 19% |
| Zambia | $575  | 44% | $417  | 32% | $483  | 37% | $539  | 41% |
| Zimbabwe | $273  | 30% | $202  | 22% | $239  | 26% | $263  | 28% |

| **Supplementary File 2.**  **Variables used to calculate DALYs averted** |
| --- |
| **Variable** | **Measure used** | **Source** | **Year used** |
| 5-year probability of death for females, males and both for ages in a given age category *a* | $$1-exp⁡(\frac{-MR\_{i}^{a}}{100,000})$$where MR is all cause death rate per 100,000,  *a* represents age category and *i* represents country | Global Burden of Disease (downloaded January 6, 2017) | 2015 |
| Absolute number of death for females, males and by age category | Number of all cause deaths |
| YLD | Total for all diseases by country |
| Conditional life expectancy for females, males and both by age category  | Conditional life expectancy at <1 year, 1-4, 5-9, … , 75-79, 80+ | Global Burden of Disease (downloaded October 20, 2017) |
| Population by females, males and both by age category | $$\frac{Absolute deaths\_{i}^{a}}{5-year p(death)\_{i}^{a}}$$where *a* represents age category and *i* represents country | Calculated from Global Burden of Disease (downloaded January 6, 2017) for internal consistency |
| Per capita GDP (2015 US$) | GDP per capita (current US$) | World Bank (downloaded February 7, 2017) | 2015 or most recent year on file  |
| Government health expenditure (2015 US$) | Health expenditure per capita (current US$) | World Bank (downloaded February 6, 2017) | 2014 |
| YLL | $$YLL\_{i}^{all ages} =$$$$CLE\_{i}^{<1}\*absolute deaths\_{i}^{<1}+CLE\_{i}^{1-4}\*absolute deaths\_{i}^{1-4}+CLE\_{i}^{5-9}\*absolute deaths\_{i}^{5-9}+…+CLE\_{i}^{80 and over}\*absolute deaths\_{i}^{80 and over}$$ | Calculated from absolute deaths and conditional life expectancy variables | 2015 |
| DALY | $$DALY\_{i}=YLL\_{i}+YLD\_{i}$$where *i* represents country | Calculated from YLL and YLD variables | 2015 |