

**TABLE 2C-20**  
**MORTALITY RATES<sup>a</sup> FOR THE SELECTED FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)**  
**IN URBAN AND RURAL AREAS<sup>c</sup>, ARIZONA, 2009-2019**

| Area/Cause                          | 2009    | 2010    | 2011    | 2012    | 2013    | 2014     | 2015     | 2016     | 2017     | 2018     | 2019     | % change from 2009 |
|-------------------------------------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|--------------------|
| <b>URBAN</b>                        |         |         |         |         |         |          |          |          |          |          |          |                    |
| Malignant neoplasms                 | 165.4   | 164.6   | 166.5   | 171.8   | 169.1   | 153.8    | 164.8    | 162.1    | 156.3    | 156.4    | 153.7    | -7.1               |
| Diseases of heart                   | 101.3   | 98.6    | 103.9   | 95.9    | 96.5    | 89.5     | 100.3    | 106.3    | 101.7    | 100.2    | 103.9    | 2.6                |
| Accidents (unintentional injuries)  | 48.8    | 47.5    | 45.4    | 47.6    | 51.5    | 47.3     | 50.2     | 61.3     | 61.3     | 60.0     | 66.1     | 35.5               |
| Other                               | 37.3    | 36.5    | 12.4    | 35.7    | 38.5    | 36.7     | 37.8     | 45.3     | 46.6     | 46.0     | 52.4     | 40.5               |
| Motor vehicle accidents             | 11.5    | 11.1    | 11.9    | 11.9    | 13.0    | 10.6     | 12.4     | 16.0     | 14.7     | 14.0     | 13.6     | 18.3               |
| Chronic liver disease and cirrhosis | 25.7    | 27.2    | 30.8    | 31.5    | 29.9    | 31.5     | 32.6     | 30.3     | 30.1     | 29.9     | 28.5     | 10.9               |
| Chronic lower respiratory diseases  | 20.2    | 19.2    | 20.6    | 22.9    | 22.6    | 23.4     | 25.0     | 25.9     | 24.0     | 24.4     | 21.0     | 4.0                |
| ALL CAUSES                          | 559.4   | 552.4   | 561.5   | 575.8   | 579.8   | 584.2    | 596.5    | 613.0    | 583.1    | 595.1    | 586.3    | 4.8                |
| (Number of all deaths)              | (6,979) | (7,098) | (7,274) | (7,513) | (7,631) | (7,855)  | (8,128)  | (8,485)  | (8,223)  | (8,527)  | (8,485)  | 21.6               |
| <b>RURAL</b>                        |         |         |         |         |         |          |          |          |          |          |          |                    |
| Malignant neoplasms                 | 176.9   | 193.1   | 186.3   | 187.8   | 204.7   | 175.4    | 196.4    | 184.3    | 182.9    | 186.2    | 196.3    | 11.0               |
| Diseases of heart                   | 164.3   | 137.4   | 143.7   | 152.5   | 142.2   | 133.3    | 163.5    | 159.6    | 140.1    | 162.6    | 139.1    | -15.3              |
| Accidents (unintentional injuries)  | 71.4    | 66.2    | 67.6    | 55.3    | 75.8    | 73.3     | 72.6     | 83.8     | 91.5     | 86.9     | 94.1     | 31.8               |
| Other                               | 46.6    | 42.6    | 16.5    | 36.4    | 51.7    | 52.8     | 46.6     | 58.3     | 64.2     | 55.6     | 71.4     | 53.2               |
| Motor vehicle accidents             | 24.8    | 23.6    | 22.5    | 18.9    | 24.1    | 20.5     | 26.0     | 25.5     | 27.2     | 31.3     | 22.7     | -8.5               |
| Chronic liver disease and cirrhosis | 43.3    | 41.9    | 49.3    | 47.5    | 57.1    | 41.7     | 59.2     | 61.9     | 56.6     | 53.5     | 59.7     | 37.9               |
| Chronic lower respiratory diseases  | 27.4    | 22.2    | 36.3    | 33.2    | 32.3    | 34.1     | 33.9     | 37.9     | 41.7     | 49.1     | 35.5     | 29.6               |
| ALL CAUSES                          | 713.2   | 708.3   | 716.6   | 720.2   | 786.8   | 751.4    | 821.2    | 808.3    | 781.1    | 842.7    | 839.6    | 17.7               |
| (Number of all deaths)              | (1,927) | (2,010) | (2,035) | (2,017) | (2,191) | (2,091)  | (2,275)  | (2,219)  | (2,152)  | (2,317)  | (2,293)  | 19.0               |
| <b>TOTAL</b>                        |         |         |         |         |         |          |          |          |          |          |          |                    |
| Malignant neoplasms                 | 167.9   | 170.6   | 171.2   | 175.2   | 175.6   | 157.9    | 170.6    | 167.0    | 161.8    | 161.6    | 160.9    | -4.2               |
| Diseases of heart                   | 112.9   | 106.7   | 112.0   | 106.5   | 105.5   | 97.4     | 112.2    | 116.9    | 109.9    | 111.2    | 110.0    | -2.6               |
| Accidents (unintentional injuries)  | 53.6    | 52.4    | 50.3    | 50.0    | 57.4    | 53.0     | 55.7     | 68.5     | 69.7     | 65.6     | 71.3     | 33.0               |
| Other                               | 39.5    | 38.8    | 13.4    | 36.7    | 41.8    | 40.4     | 40.8     | 50.3     | 52.5     | 48.5     | 56.1     | 42.0               |
| Motor vehicle accidents             | 14.0    | 13.6    | 14.1    | 13.3    | 15.6    | 12.6     | 14.9     | 18.2     | 17.2     | 17.1     | 15.2     | 8.6                |
| Chronic liver disease and cirrhosis | 29.1    | 30.2    | 34.3    | 35.0    | 34.7    | 33.6     | 37.7     | 36.3     | 35.1     | 34.0     | 33.6     | 15.5               |
| Chronic lower respiratory diseases  | 21.5    | 20.0    | 23.6    | 25.1    | 24.7    | 25.4     | 26.6     | 28.2     | 27.3     | 28.4     | 23.5     | 9.3                |
| ALL CAUSES                          | 590.0   | 587.2   | 595.0   | 607.6   | 620.7   | 617.7    | 641.0    | 657.8    | 626.8    | 639.4    | 629.7    | 6.7                |
| (Number of all deaths)              | (8,855) | (9,212) | (9,398) | (9,630) | (9,898) | (10,025) | (10,510) | (10,911) | (10,567) | (10,920) | (10,834) | 22.3               |

Notes: <sup>a</sup> Rates are presented per 100,000 middle-aged adults 45-64 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2009-2019 period; <sup>c</sup> Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2009-2019 are classified by ICD-10; measures of comparison between ICD-9 and ICD-10 - the "comparability ratios" - for the causes of death shown in this report are provided in the **Technical Notes**.