

## LEADING CAUSES OF DEATH AMONG SAN DIEGO COUNTY RESIDENTS BY HHS REGION<sup>†</sup>, 2010

Number and Percent of Deaths

| COUNTY-WIDE RANK in 2010 <sup>a</sup> | CAUSE OF DEATH <sup>b</sup>                                     | REGION <sup>†</sup> |              |                  |              |                  |              |                  |              |                  |              |                  |              |
|---------------------------------------|---|---------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|
|                                       |   | N. Coastal          |              | N. Central       |              | Central          |              | South            |              | East             |              | N. Inland        |              |
|                                       |   | number of deaths    | %            | number of deaths | %            | number of deaths | %            | number of deaths | %            | number of deaths | %            | number of deaths | %            |
| 1                                     | Malignant neoplasms   | 815                 | 25.0         | 888              | 26.4         | 658              | 25.1         | 701              | 26.6         | 883              | 25.2         | 889              | 23.3         |
| 2                                     | Diseases of heart   | 776                 | 23.8         | 757              | 22.5         | 649              | 24.8         | 652              | 24.7         | 818              | 23.4         | 889              | 23.3         |
| 3                                     | Alzheimer's disease   | 262                 | 8.0          | 223              | 6.6          | 97               | 3.7          | 124              | 4.7          | 186              | 5.3          | 299              | 7.8          |
| 4                                     | Chronic lower respiratory diseases                              | 197                 | 6.0          | 170              | 5.1          | 128              | 4.9          | 122              | 4.6          | 196              | 5.6          | 245              | 6.4          |
| 5                                     | Cerebrovascular diseases  | 182                 | 5.6          | 173              | 5.1          | 124              | 4.7          | 161              | 6.1          | 179              | 5.1          | 214              | 5.6          |
| 6                                     | Accidents (unintentional injuries)                              | 164                 | 5.0          | 151              | 4.5          | 150              | 5.7          | 92               | 3.5          | 170              | 4.9          | 186              | 4.9          |
| 7                                     | Diabetes mellitus   | 66                  | 2.0          | 73               | 2.2          | 97               | 3.7          | 109              | 4.1          | 132              | 3.8          | 102              | 2.7          |
| 8                                     | Intentional self-harm (suicide)                                 | 57                  | 1.7          | 82               | 2.4          | 50               | 1.9          | 30               | 1.1          | 61               | 1.7          | 70               | 1.8          |
| 9                                     | Chronic liver disease and cirrhosis                             | 60                  | 1.8          | 46               | 1.4          | 51               | 1.9          | 38               | 1.4          | 58               | 1.7          | 57               | 1.5          |
| 10                                    | Influenza and pneumonia   | 54                  | 1.7          | 62               | 1.8          | 33               | 1.3          | 40               | 1.5          | 47               | 1.3          | 53               | 1.4          |
| 11                                    | Essential (primary) hypertension and hypertensive renal disease | 39                  | 1.2          | 38               | 1.1          | 39               | 1.5          | 24               | 0.9          | 83               | 2.4          | 57               | 1.5          |
| 12                                    | Parkinson's disease   | 44                  | 1.3          | 46               | 1.4          | 16               | 0.6          | 22               | 0.8          | 34               | 1.0          | 53               | 1.4          |
| 13                                    | Nephritis, nephrotic syndrome and nephrosis                     | 19                  | 0.6          | 17               | 0.5          | 17               | 0.6          | 24               | 0.9          | 27               | 0.8          | 34               | 0.9          |
| 14                                    | Septicemia  | 14                  | 0.4          | 31               | 0.9          | 23               | 0.9          | 21               | 0.8          | 24               | 0.7          | 17               | 0.4          |
| 15                                    | Viral hepatitis   | 14                  | 0.4          | 14               | 0.4          | 25               | 1.0          | 26               | 1.0          | 26               | 0.7          | 18               | 0.5          |
|                                       | All Other Causes  | 498                 | 15.3         | 595              | 17.7         | 462              | 17.6         | 450              | 17.1         | 577              | 16.5         | 636              | 16.7         |
|                                       | <b>TOTAL DEATHS:</b>  | <b>3,261</b>        | <b>100.0</b> | <b>3,366</b>     | <b>100.0</b> | <b>2,619</b>     | <b>100.0</b> | <b>2,636</b>     | <b>100.0</b> | <b>3,501</b>     | <b>100.0</b> | <b>3,819</b>     | <b>100.0</b> |

<sup>a</sup> Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the county-wide rank among San Diego County residents in 2010.

<sup>b</sup> Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

<sup>†</sup> HHS Regions were created by grouping contiguous zip codes.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Death Statistical Master Files; SANDAG January 1 population estimates (2001-2010 estimates released July 2012)

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch, 7/26/2012

## LEADING CAUSES OF DEATH AMONG SAN DIEGO COUNTY RESIDENTS BY HHSA REGION<sup>†</sup>, 2010

Age-Adjusted Rates

| COUNTY-WIDE RANK in 2010 <sup>a</sup> | CAUSE OF DEATH <sup>b</sup>                                     | AGE-ADJUSTED RATES <sup>c</sup> |              |              |              |              |              | SAN DIEGO COUNTY |
|---------------------------------------|---|---------------------------------|--------------|--------------|--------------|--------------|--------------|------------------|
|                                       |   | REGION <sup>†</sup>             |              |              |              |              |              |                  |
|                                       |   | N. Coastal                      | N. Central   | Central      | South        | East         | N. Inland    |                  |
| 1                                     | Malignant neoplasms   | 154.3                           | 149.8        | 177.6        | 168.5        | 180.4        | 145.4        | 161.3            |
| 2                                     | Diseases of heart   | 136.5                           | 120.5        | 178.6        | 157.7        | 164.1        | 135.7        | 146.6            |
| 3                                     | Alzheimer's disease   | 43.8                            | 34.3         | 27.9         | 29.6         | 36.3         | 43.8         | 37.2             |
| 4                                     | Chronic lower respiratory diseases                              | 37.1                            | 27.8         | 36.9         | 29.7         | 40.8         | 40.4         | 35.7             |
| 5                                     | Cerebrovascular diseases  | 32.1                            | 28.6         | 34.1         | 39.2         | 35.7         | 33.4         | 33.7             |
| 6                                     | Accidents (unintentional injuries)                              | 29.7                            | 24.3         | 33.2         | 21.2         | 34.7         | 31.1         | 29.2             |
| 7                                     | Diabetes mellitus   | 11.8                            | 12.2         | 26.1         | 26.5         | 26.6         | 17.0         | 19.1             |
| 8                                     | Intentional self-harm (suicide)                                 | 10.3                            | 13.0         | 10.9         | 6.2          | 12.0         | 11.8         | 11.0             |
| 9                                     | Chronic liver disease and cirrhosis                             | 11.0                            | 7.8          | 12.2         | 8.7          | 11.1         | 9.0          | 9.9              |
| 10                                    | Influenza and pneumonia   | 9.2                             | 9.7          | 9.3          | 9.5          | 9.1          | 8.5          | 9.2              |
| 11                                    | Essential (primary) hypertension and hypertensive renal disease | 7.0                             | 5.6          | 10.6         | 5.8          | 16.6         | 9.1          | 9.0              |
| 12                                    | Parkinson's disease   | 7.6                             | 7.6          | *            | 5.5          | 7.6          | 8.3          | 7.2              |
| 13                                    | Nephritis, nephrotic syndrome and nephrosis                     | *                               | *            | *            | 6.0          | 5.5          | 5.5          | 4.5              |
| 14                                    | Septicemia  | *                               | 5.2          | 6.7          | 5.3          | 5.1          | *            | 4.4              |
| 15                                    | Viral hepatitis   | *                               | *            | 5.7          | 5.8          | 4.5          | *            | 3.8              |
| <b>TOTAL DEATHS:</b>                  |   | <b>588.9</b>                    | <b>548.3</b> | <b>699.9</b> | <b>632.1</b> | <b>708.3</b> | <b>605.1</b> | <b>627.6</b>     |

<sup>a</sup> Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the county-wide rank among San Diego County residents in 2010.

<sup>b</sup> Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

<sup>†</sup> HHSA Regions were created by grouping contiguous zip codes.

\* Rate not calculated for fewer than 20 deaths in this category.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Death Statistical Master Files;  
SANDAG January 1 population estimates (2001-2010 estimates released July 2012)

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**Table 1. North Coastal Region**

| Rank <sup>a</sup> | Cause of Death <sup>b</sup>         | Number of Deaths | %            | Crude Rate <sup>c</sup> | Age-adjusted Rate <sup>c</sup> |
|-------------------|-------------------------------------|------------------|--------------|-------------------------|--------------------------------|
| 1                 | Malignant neoplasms (all cancers)   | 815              | 25.0         | 157.4                   | 154.3                          |
| 2                 | Diseases of heart                   | 776              | 23.8         | 149.8                   | 136.5                          |
| 3                 | Alzheimer's disease                 | 262              | 8.0          | 50.6                    | 43.8                           |
| 4                 | Chronic lower respiratory diseases  | 197              | 6.0          | 38.0                    | 37.1                           |
| 5                 | Cerebrovascular diseases            | 182              | 5.6          | 35.1                    | 32.1                           |
| 6                 | Accidents (unintentional injuries)  | 164              | 5.0          | 31.7                    | 29.7                           |
| 7                 | Diabetes mellitus                   | 66               | 2.0          | 12.7                    | 11.8                           |
| 8                 | Chronic liver disease and cirrhosis | 60               | 1.8          | 11.6                    | 11.0                           |
| 9                 | Intentional self-harm (suicide)     | 57               | 1.7          | 11.0                    | 10.3                           |
| 10                | Influenza and pneumonia             | 54               | 1.7          | 10.4                    | 9.2                            |
|                   | All other causes                    | 628              | 19.3         |                         |                                |
|                   | <b>TOTAL DEATHS</b>                 | <b>3,261</b>     | <b>100.0</b> | <b>629.7</b>            | <b>588.9</b>                   |

**Table 2. North Central Region**

| Rank <sup>a</sup> | Cause of Death <sup>b</sup>        | Number of Deaths | %            | Crude Rate <sup>c</sup> | Age-adjusted Rate <sup>c</sup> |
|-------------------|------------------------------------|------------------|--------------|-------------------------|--------------------------------|
| 1                 | Malignant neoplasms (all cancers)  | 888              | 26.4         | 148.9                   | 149.8                          |
| 2                 | Diseases of heart                  | 757              | 22.5         | 126.9                   | 120.5                          |
| 3                 | Alzheimer's disease                | 223              | 6.6          | 37.4                    | 34.3                           |
| 4                 | Cerebrovascular diseases           | 173              | 5.1          | 29.0                    | 28.6                           |
| 5                 | Chronic lower respiratory diseases | 170              | 5.1          | 28.5                    | 27.8                           |
| 6                 | Accidents (unintentional injuries) | 151              | 4.5          | 25.3                    | 24.3                           |
| 7                 | Intentional self-harm (suicide)    | 82               | 2.4          | 13.7                    | 13.0                           |
| 8                 | Diabetes mellitus                  | 73               | 2.2          | 12.2                    | 12.2                           |
| 9                 | Influenza and pneumonia            | 62               | 1.8          | 10.4                    | 9.7                            |
| 10                | Parkinson's disease                | 46               | 1.4          | 7.7                     | 7.6                            |
|                   | All other causes                   | 741              | 22.0         |                         |                                |
|                   | <b>TOTAL DEATHS</b>                | <b>3,366</b>     | <b>100.0</b> | <b>564.3</b>            | <b>548.3</b>                   |

**Table 3. Central Region**

| Rank <sup>a</sup> | Cause of Death <sup>b</sup>                                     | Number of Deaths | %            | Crude Rate <sup>c</sup> | Age-adjusted Rate <sup>c</sup> |
|-------------------|---|------------------|--------------|-------------------------|--------------------------------|
| 1                 | Malignant neoplasms (all cancers)                               | 658              | 25.1         | 137.6                   | 177.6                          |
| 2                 | Diseases of heart   | 649              | 24.8         | 135.7                   | 178.6                          |
| 3                 | Accidents (unintentional injuries)                              | 150              | 5.7          | 31.4                    | 33.2                           |
| 4                 | Chronic lower respiratory diseases                              | 128              | 4.9          | 26.8                    | 36.9                           |
| 5                 | Cerebrovascular diseases  | 124              | 4.7          | 25.9                    | 34.1                           |
| 6                 | Diabetes mellitus   | 97               | 3.7          | 20.3                    | 26.1                           |
| 7                 | Alzheimer's disease   | 97               | 3.7          | 20.3                    | 27.9                           |
| 8                 | Chronic liver disease and cirrhosis                             | 51               | 1.9          | 10.7                    | 12.2                           |
| 9                 | Intentional self-harm (suicide)                                 | 50               | 1.9          | 10.5                    | 10.9                           |
| 10                | Essential (primary) hypertension and hypertensive renal disease | 39               | 1.5          | 8.2                     | 10.6                           |
|                   | All other causes  | 576              | 22.0         |                         |                                |
|                   | <b>TOTAL DEATHS</b>   | <b>2,619</b>     | <b>100.0</b> | <b>547.8</b>            | <b>699.9</b>                   |

<sup>a</sup> Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories.

<sup>b</sup> Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

<sup>c</sup> All rates are per 100,000 population; age-adjusted rates are adjusted to 2000 U.S. Standard Population.

<sup>†</sup> HHS Regions were created by grouping contiguous zip codes.

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## LEADING CAUSES OF DEATH IN EACH HHSA REGION <sup>†</sup>, SAN DIEGO COUNTY, 2010

### Number and Percent of Deaths, Crude Rates and Age-adjusted Rates

**Table 4. South Region**

| Rank <sup>a</sup> | Cause of Death <sup>b</sup>         | Number of Deaths | %            | Crude Rate <sup>c</sup> | Age-adjusted Rate <sup>c</sup> |
|-------------------|-------------------------------------|------------------|--------------|-------------------------|--------------------------------|
| 1                 | Malignant neoplasms (all cancers)   | 701              | 26.6         | 148.4                   | 168.5                          |
| 2                 | Diseases of heart                   | 652              | 24.7         | 138.0                   | 157.7                          |
| 3                 | Cerebrovascular diseases            | 161              | 6.1          | 34.1                    | 39.2                           |
| 4                 | Alzheimer's disease                 | 124              | 4.7          | 26.3                    | 29.6                           |
| 5                 | Chronic lower respiratory diseases  | 122              | 4.6          | 25.8                    | 29.7                           |
| 6                 | Diabetes mellitus                   | 109              | 4.1          | 23.1                    | 26.5                           |
| 7                 | Accidents (unintentional injuries)  | 92               | 3.5          | 19.5                    | 21.2                           |
| 8                 | Influenza and pneumonia             | 40               | 1.5          | 8.5                     | 9.5                            |
| 9                 | Chronic liver disease and cirrhosis | 38               | 1.4          | 8.0                     | 8.7                            |
| 10                | Intentional self-harm (suicide)     | 30               | 1.1          | 6.4                     | 6.2                            |
|                   | All other causes                    | 567              | 21.5         |                         |                                |
|                   | <b>TOTAL DEATHS</b>                 | <b>2,636</b>     | <b>100.0</b> | <b>558.0</b>            | <b>632.1</b>                   |

**Table 5. East Region**

| Rank <sup>a</sup> | Cause of Death <sup>b</sup>                                     | Number of Deaths | %            | Crude Rate <sup>c</sup> | Age-adjusted Rate <sup>c</sup> |
|-------------------|---|------------------|--------------|-------------------------|--------------------------------|
| 1                 | Malignant neoplasms (all cancers)                               | 883              | 25.2         | 190.3                   | 180.4                          |
| 2                 | Diseases of heart   | 818              | 23.4         | 176.3                   | 164.1                          |
| 3                 | Chronic lower respiratory diseases                              | 196              | 5.6          | 42.2                    | 40.8                           |
| 4                 | Alzheimer's disease   | 186              | 5.3          | 40.1                    | 36.3                           |
| 5                 | Cerebrovascular diseases  | 179              | 5.1          | 38.6                    | 35.7                           |
| 6                 | Accidents (unintentional injuries)                              | 170              | 4.9          | 36.6                    | 34.7                           |
| 7                 | Diabetes mellitus   | 132              | 3.8          | 28.4                    | 26.6                           |
| 8                 | Essential (primary) hypertension and hypertensive renal disease | 83               | 2.4          | 17.9                    | 16.6                           |
| 9                 | Intentional self-harm (suicide)                                 | 61               | 1.7          | 13.1                    | 12.0                           |
| 10                | Chronic liver disease and cirrhosis                             | 58               | 1.7          | 12.5                    | 11.1                           |
|                   | All other causes  | 735              | 21.0         |                         |                                |
|                   | <b>TOTAL DEATHS</b>   | <b>3,501</b>     | <b>100.0</b> | <b>754.6</b>            | <b>708.3</b>                   |

**Table 6. North Inland Region**

| Rank <sup>a</sup> | Cause of Death <sup>b</sup>                                     | Number of Deaths | %            | Crude Rate <sup>c</sup> | Age-adjusted Rate <sup>c</sup> |
|-------------------|---|------------------|--------------|-------------------------|--------------------------------|
| 1                 | Malignant neoplasms (all cancers)                               | 889              | 23.3         | 156.9                   | 145.4                          |
| 2                 | Diseases of heart   | 889              | 23.3         | 156.9                   | 135.7                          |
| 3                 | Alzheimer's disease   | 299              | 7.8          | 52.8                    | 43.8                           |
| 4                 | Chronic lower respiratory diseases                              | 245              | 6.4          | 43.2                    | 40.4                           |
| 5                 | Cerebrovascular diseases  | 214              | 5.6          | 37.8                    | 33.4                           |
| 6                 | Accidents (unintentional injuries)                              | 186              | 4.9          | 32.8                    | 31.1                           |
| 7                 | Diabetes mellitus   | 102              | 2.7          | 18.0                    | 17.0                           |
| 8                 | Intentional self-harm (suicide)                                 | 70               | 1.8          | 12.4                    | 11.8                           |
| 9                 | Essential (primary) hypertension and hypertensive renal disease | 57               | 1.5          | 10.1                    | 9.1                            |
| 10                | Chronic liver disease and cirrhosis                             | 57               | 1.5          | 10.1                    | 9.0                            |
|                   | All other causes  | 811              | 21.2         |                         |                                |
|                   | <b>TOTAL DEATHS</b>   | <b>3,819</b>     | <b>100.0</b> | <b>674.2</b>            | <b>605.1</b>                   |

<sup>a</sup> Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories.

<sup>b</sup> Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

<sup>c</sup> All rates are per 100,000 population; age-adjusted rates are adjusted to 2000 U.S. Standard Population.

<sup>†</sup> HHSA Regions were created by grouping contiguous zip codes.

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