

Table 8.1  
Cancer of the Esophagus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,  
Both Sexes by Race/Ethnicity

|  | JP Trend 1 |       | JP Trend 2 |       | JP Trend 3 |       | JP Trend 4 |     | JP Trend 5 |     | JP Trend 6 |     | AAPC <sup>d</sup> |         |
|--|------------|-------|------------|-------|------------|-------|------------|-----|------------|-----|------------|-----|-------------------|---------|
|  | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC | Years      | APC | Years      | APC | 2002-11           | 2007-11 |
| <u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2011</u>  |            |       |            |       |            |       |            |     |            |     |            |     |                   |         |
| All Races  | 1975-04    | 0.6*  | 2004-11    | -1.3* |            |       |            |     |            |     |            |     | -0.9*             | -1.3*   |
| White  | 1975-04    | 1.4*  | 2004-11    | -0.4  |            |       |            |     |            |     |            |     | 0.0               | -0.4    |
| Black  | 1975-86    | 1.2   | 1986-11    | -4.5* |            |       |            |     |            |     |            |     | -4.5*             | -4.5*   |
| <u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2011</u> |            |       |            |       |            |       |            |     |            |     |            |     |                   |         |
| All Races  | 1992-11    | -0.3  |            |       |            |       |            |     |            |     |            |     | -0.3              | -0.3    |
| White  | 1992-11    | 0.7*  |            |       |            |       |            |     |            |     |            |     | 0.7*              | 0.7*    |
| Black  | 1992-11    | -4.6* |            |       |            |       |            |     |            |     |            |     | -4.6*             | -4.6*   |
| <u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2011</u>        |            |       |            |       |            |       |            |     |            |     |            |     |                   |         |
| All Races  | 1975-04    | 0.6*  | 2004-11    | -1.5* |            |       |            |     |            |     |            |     | -1.0*             | -1.5*   |
| White  | 1975-04    | 1.4*  | 2004-11    | -0.6  |            |       |            |     |            |     |            |     | -0.1              | -0.6    |
| Black  | 1975-86    | 1.2   | 1986-11    | -4.5* |            |       |            |     |            |     |            |     | -4.5*             | -4.5*   |
| <u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2011</u>       |            |       |            |       |            |       |            |     |            |     |            |     |                   |         |
| All Races  | 1992-11    | -0.3  |            |       |            |       |            |     |            |     |            |     | -0.3              | -0.3    |
| White  | 1992-11    | 0.6*  |            |       |            |       |            |     |            |     |            |     | 0.6*              | 0.6*    |
| White NH <sup>ef</sup>   | 1992-04    | 1.7*  | 2004-11    | -0.7  |            |       |            |     |            |     |            |     | -0.2              | -0.7    |
| Black  | 1992-11    | -4.6* |            |       |            |       |            |     |            |     |            |     | -4.6*             | -4.6*   |
| Black NH <sup>ef</sup>   | 1992-11    | -4.6* |            |       |            |       |            |     |            |     |            |     | -4.6*             | -4.6*   |
| API <sup>e</sup>   | 1992-11    | -1.7* |            |       |            |       |            |     |            |     |            |     | -1.7*             | -1.7*   |
| AI/AN <sup>eg</sup>  | 1992-11    | -1.0  |            |       |            |       |            |     |            |     |            |     | -1.0              | -1.0    |
| Hispanic <sup>f</sup>  | 1992-11    | -1.1* |            |       |            |       |            |     |            |     |            |     | -1.1*             | -1.1*   |
| <u>U.S. Cancer Mortality<sup>c</sup>, 1975-2011</u>            |            |       |            |       |            |       |            |     |            |     |            |     |                   |         |
| All Races  | 1975-02    | 0.7*  | 2002-11    | -0.7* |            |       |            |     |            |     |            |     | -0.7*             | -0.7*   |
| White  | 1975-83    | 0.4   | 1983-02    | 1.7*  | 2002-11    | -0.1  |            |     |            |     |            |     | -0.1              | -0.1    |
| Black  | 1975-82    | 1.1*  | 1982-93    | -1.6* | 1993-11    | -4.6* |            |     |            |     |            |     | -4.6*             | -4.6*   |
| <u>U.S. Cancer Mortality<sup>c</sup>, 1992-2011</u>            |            |       |            |       |            |       |            |     |            |     |            |     |                   |         |
| All Races  | 1992-02    | 0.6*  | 2002-11    | -0.7* |            |       |            |     |            |     |            |     | -0.7*             | -0.7*   |
| White  | 1992-02    | 1.6*  | 2002-11    | -0.1  |            |       |            |     |            |     |            |     | -0.1              | -0.1    |
| White NH <sup>ef</sup>   | 1992-02    | 1.9*  | 2002-11    | 0.0   |            |       |            |     |            |     |            |     | 0.0               | 0.0     |
| Black  | 1992-11    | -4.5* |            |       |            |       |            |     |            |     |            |     | -4.5*             | -4.5*   |
| Black NH <sup>ef</sup>   | 1992-11    | -4.4* |            |       |            |       |            |     |            |     |            |     | -4.4*             | -4.4*   |
| API <sup>e</sup>   | 1992-11    | -1.9* |            |       |            |       |            |     |            |     |            |     | -1.9*             | -1.9*   |
| AI/AN <sup>eg</sup>  | 1992-04    | 4.3*  | 2004-11    | -4.6* |            |       |            |     |            |     |            |     | -2.7              | -4.6*   |
| Hispanic <sup>f</sup>  | 1992-11    | -0.7* |            |       |            |       |            |     |            |     |            |     | -0.7*             | -0.7*   |

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).  
<sup>a</sup> The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).  
<sup>c</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).  
<sup>d</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.  
<sup>e</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.  
<sup>f</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic  
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.  
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.  
<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.  
\* The APC/AAPC is significantly different from zero (p<.05).  
- Joinpoint regression line analysis could not be performed on data series.