

Chapter 10

## Incidence and Mortality by Sex and Year West Virginia Residents 1993 - 2001

		М	ale			Fei	nale		Total				
	New	Incid.		Mort.	New	Incid.		Mort.	New	Incid.		Mort.	
Year	Cases	Rate	Deaths	Rate	Cases	Rate	Deaths	Rate	Cases	Rate	Deaths	Rate	
1993	88	9.9	32	3.6	18	1.6	12	1.0	106	5.2	44	2.1	
1994	104	12.0	30	3.3	24	2.2	5	0.5	128	6.4	35	1.7	
1995	82	9.2	32	3.6	37	3.2	13	1.2	119	5.7	45	2.2	
1996	89	10.0	33	3.6	28	2.4	6	0.5	117	5.7	39	1.8	
1997	99	10.8	26	2.9	22	1.9	11	0.9	121	5.9	37	1.7	
1998	99	10.7	26	2.8	22	1.8	10	8.0	121	5.8	36	1.7	
1999	101	10.5	28	3.0	27	2.4	9	0.7	128	6.0	37	1.7	
2000	93	9.8	31	3.4	30	2.7	8	0.6	123	5.8	39	1.8	
2001	96	10.1	24	2.5	22	1.9	9	8.0	118	5.6	33	1.6	

Number of new cases excludes in situ cases.

Rates are per 100,000 West Virginia residents and are age-adjusted to the 2000 U.S. standard population.

**Table 10.1** 

#### Overview

- For 1997-2001, cancer of the larynx was rare among individuals under the age of 45. Incidence then increased with age (Figure 10.3).
- The 1997-2001 average annual age-adjusted incidence rate in West Virginia males (10.4 per 100,000) was over four times that of females (2.2 per 100,000) (Figures 1.3 and 1.4). This gender difference was most pronounced in older age groups (Figure 10.3). Nationally, gender differences and time trends of this disease have reflected changing patterns of tobacco use.
- ➤ In 1997-2001, more than half (57%) of all laryngeal cancers in West Virginia residents were diagnosed at an in situ or local stage (Figure 10.4). Five-year survival rates for some early stage laryngeal cancers are fairly good. Survival rates decline with more advanced disease.
- Like incidence rates, 1997-2001 average annual mortality rates for West Virginia men (2.9 per 100,000) were much higher than those for West Virginia women (0.8 per 100,000) (Figures 1.3 and 1.4).
- State-specific data (1996-2000) ranked West Virginia sixth for men and fourth for women in ageadjusted mortality rates for cancer of the larynx among the 50 states and the District of Columbia (Appendix B).

#### **Risk Factors**

- Tobacco use increases the risk of cancer of the larynx nearly tenfold.
- Exposure to asbestos, nickel, or mustard gas has been suggested as risk factors.
- About one-fourth of people with laryngeal cancer are infected with human papillomavirus.

#### Prevention

Cessation of smoking and use of other tobacco products is the most important step in preventing this cancer.

### **76** West Virginia Cancer Registry

Incidence Rates\*, Age-Adjusted West Virginia Residents 1993 - 2001, U.S. Residents 1993 - 2000

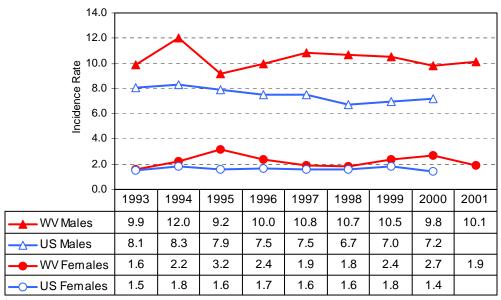


Figure 10.1

# Cancer of the Larynx

Mortality Rates\*, Age-Adjusted West Virginia Residents 1993 - 2001, U.S. Residents 1993 - 2000

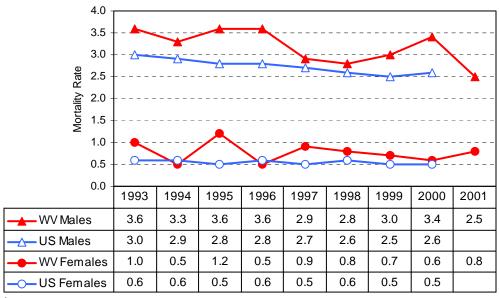


Figure 10.2

Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population. U.S. rates are from SEER (Ries et al., 2003).

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Incidence Rates\*, Age-Specific West Virginia Residents 1997 - 2001

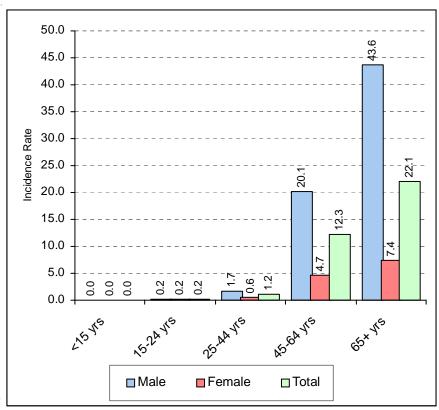


Figure 10.3

### Cancer of the Larynx Most Frequent Histologies West Virginia Residents 1997 - 2001

ICD-O Code	Histology	% of Inva- sive Cases
8070	Squamous Cell Carcinoma, NOS	75.5
8071	Squamous Cell Carcinoma,	
	Keratinizing	17.0
8000	Malignant Neoplasm	1.6
8072	Squamous Cell Carcinoma,	
	Nonkeratinizing	1.3
8052	Papillary Squamous Cell Carcinoma	1.0

**Table 10.2** 

### Cancer of the Larynx Stage of Disease at Diagnosis West Virginia Residents 1997 - 2001

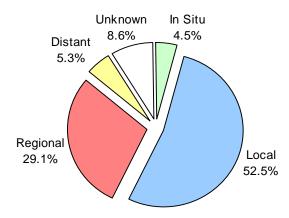
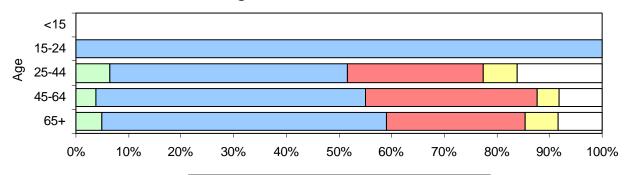


Figure 10.4

<sup>\*</sup>Five-year average annual rate per 100,000 West Virginia residents

## Stage of Disease at Diagnosis by Age West Virginia Residents 1997 - 2001



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	In Situ		Local		Regional		Distant		Unknown		Total	
Age	#	%	#	%	#	%	#	%	#	%	#	%
<15	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
15-24	0	0.0%		-	0	0.0%	0	0.0%	0	0.0%	~	100.0%
25-44	~		~		8	25.8%	~		5	16.1%	~	100.0%
45-64	~		146	51.2%	93	32.6%	~		23	8.1%	285	100.0%
65+	16	5.0%	174	54.0%	85	26.4%	20	6.2%	27	8.4%	322	100.0%
Total	29	4.5%	336	52.5%	186	29.1%	34	5.3%	55	8.6%	640	100.0%

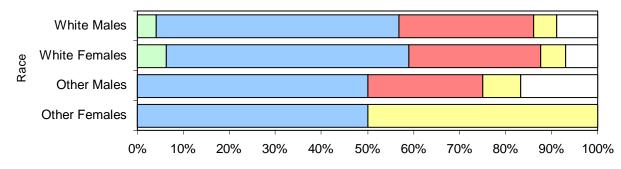
<sup>~</sup> Suppressed due to small cell size

Total may not add to 100% due to rounding.

Figure  $\overline{10.5}$ 

## Cancer of the Larynx

## Stage of Disease at Diagnosis by Race and Sex West Virginia Residents 1997 - 2001



□ In Situ □ Local	Regional	□ Distant	□Unknown
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	In Situ		Local		Regional		Distant		Unknown		Total	
Race/Sex	#	%	#	%	#	%	#	%	#	%	#	%
White Males	21	4.2%	261	52.5%	146	29.4%	25	5.0%	44	8.9%	497	100.0%
White Females	8	6.2%	68	52.7%	37	28.7%	7	5.4%	9	7.0%	129	100.0%
Other Males	0	0.0%		~		~		~		~		100.0%
Other Females	0	0.0%		~		~		~		~		100.0%
Total	29	4.5%	336	52.5%	186	29.1%	34	5.3%	55	8.6%	640	100.0%

Suppressed due to small cell size

Total may not add to 100% due to rounding.

Figure 10.6