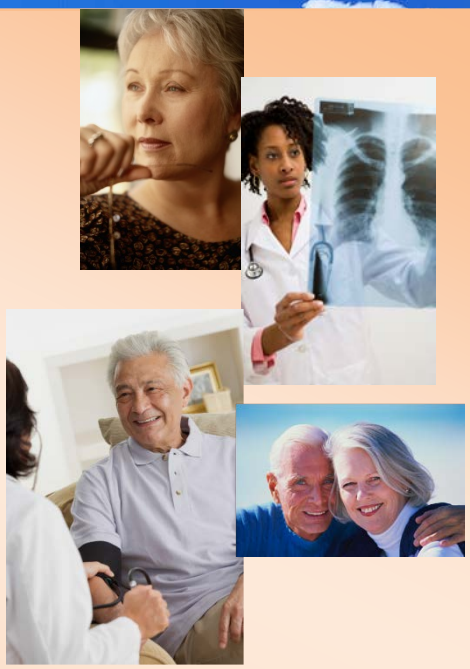
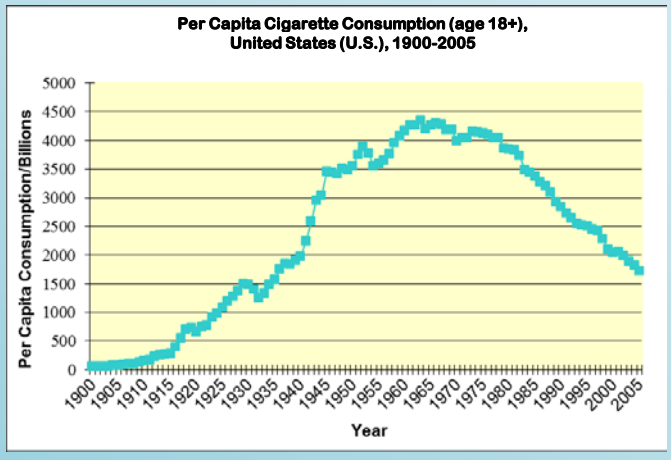
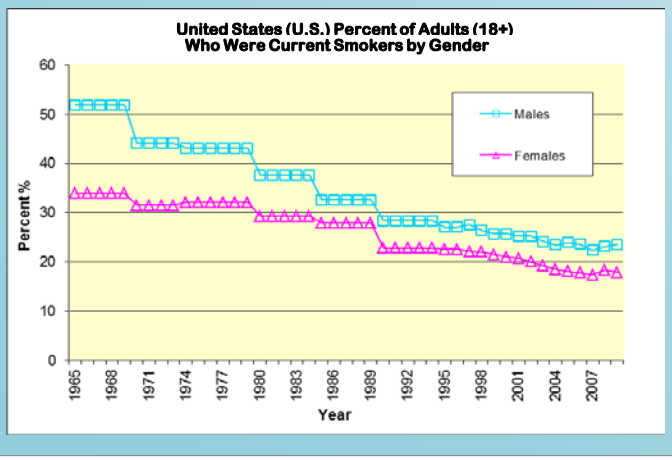
Smoking-Related Cancers in New Jersey and the United States

- The American Cancer Society estimates that in 2011, about 171,600 cancer deaths will be caused by tobacco use alone. Thirty percent of cancer deaths, including 87% of lung cancer deaths, can be attributed to tobacco.[1]
- Tobacco use is the primary risk factor for lung cancer. Tobacco use is also associated with cancers of the oropharynx and larynx as well as esophagus, stomach, bladder, pancreas and kidney.[1]
- Like all cancers, there is a long period of time (10 to 30+ years) between exposure to the carcinogen and a diagnosis of lung cancer. Because of this period of latency, one would expect to see changes in cancer rates due to changes in tobacco use many years later.
- The incidence and mortality attributed to lung and other smoking-related cancers rose steadily since the 1930s primarily due to dramatic increases in cigarette smoking between 1900 and 1960, especially during and after the World Wars I and II.[2]







Smoking Trends

- The widespread use of tobacco cigarettes in the U.S. mostly occurred in the 20th century. Men began smoking in large numbers in the earlier part of the 1900s, while women began to smoke in greater numbers in the 1930s.[2]
- The per capita cigarette consumption in the U.S. reached its highest level from the late 1950s to the late 1970s and has continued to decline from the early 1980s to the present.[3,4]
- Although the high prevalence of smoking among men has declined greatly over the years, men have continued to have a slightly higher prevalence compared to women.

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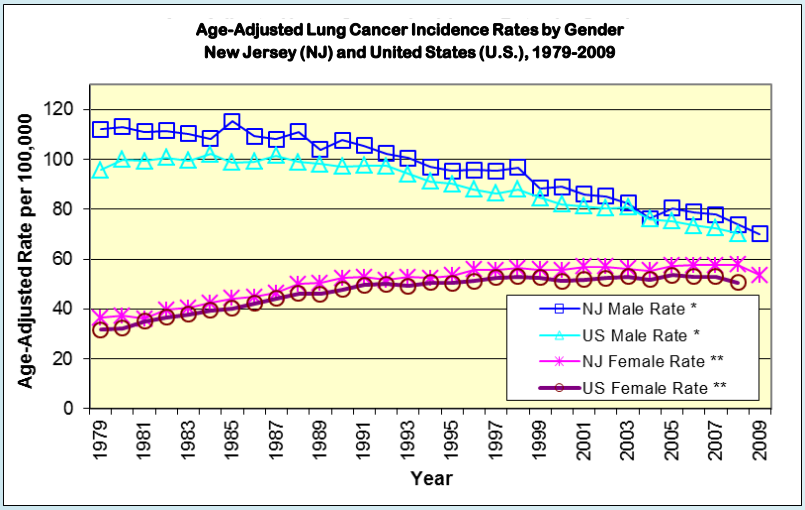
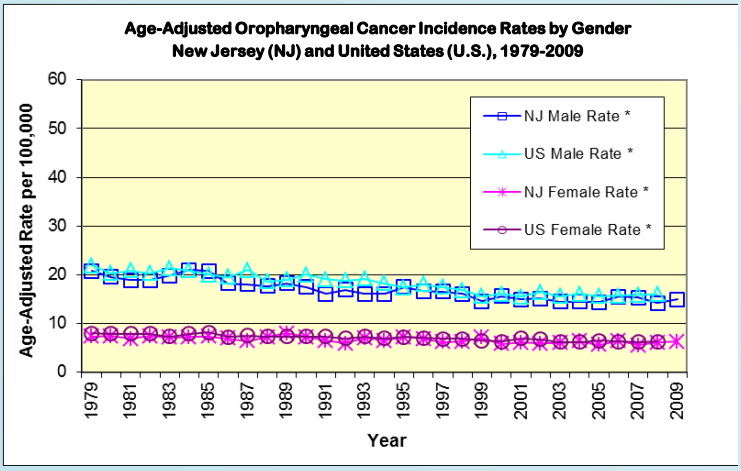
Lung Cancer

- In N.J., there are about 6,000 new cases (Males N=3000, Females N=3,000) of lung cancer diagnosed each year.
- Male age-adjusted lung cancer incidence rates have shown a statistically significant **decrease** since about 1980 for both N.J. and the U.S.
- Female age-adjusted lung cancer incidence rates have shown a statistically significant **increase** since about 1980 for both N.J. and the U.S., though the trend is leveling off.
- Lung cancer age-adjusted incidence rates among men and women are converging over time.



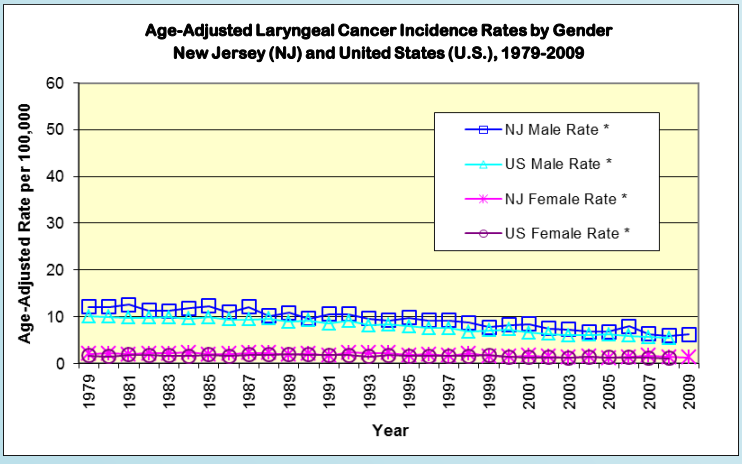
Cancer of the Oral Cavity and Pharynx

- In N.J., there are about 960 new cases (Males N=640, Females N=310) of cancer of the oral cavity and pharynx diagnosed each year.
- Both male and female age-adjusted oropharyngeal cancer incidence rates have shown a statistically significant **decrease** over time for both N.J. and the U.S.



Cancer of the Larynx

- In N.J., there are about 350 new cases (Males N=280, Females N=70) of cancer of the larynx diagnosed each year.
- Both male and female age-adjusted laryngeal cancer incidence rates have shown a statistically significant **decrease** over time for both N.J. and the U.S.
- For males, the NJ age-adjusted laryngeal cancer incidence rates are slightly higher compared to the US.



Rates are number of cases per 100,000 and are age-adjusted to the 2000 population standard. N.J. annual average cancer counts based on 2005-2009 data. *Statistically significant decrease in rates; **Statistically significant increase in rates

All references are available at www.nj.gov/health/eohs/cancer

Data Sources and Footnotes

CANCER DATA

New Jersey Cancer Incidence Data: New Jersey State Cancer Registry, New Jersey Department of Health and Senior Services

United States Incidence – Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: SEER 9 Regs Research Data, 1973-2008

SMOKING DATA

United States Percent of Adults (18+) Who Were Current Smokers by Gender:

Numerator: Number of adults aged 18 years and older who have smoked at least 100 cigarettes in their life time and who now report smoking cigarettes every day or some days.

Denominator: Number of adults aged 18 years and older.

Data Source: National Health Interview Survey, 1965-2009, National Center for Health Statistics, Centers for Disease Control and Prevention.

Supporting Data

Percent Change (PC) and Annual Percent Change (APC) for Selected Cancers, New Jersey (1979-2009) and US (SEER 9, 1979-2008)

			Total PC	APC
Lung and Bronchus	**Male**	NJ	-36.1	-1.5*
		SEER 9	-27.1	-1.3*
	Female	NJ	51.2	1.3**
		SEER 9	62.1	1.4**
Oral Cavity and Pharynx	**Male**	NJ	-27.8	-1.2*
		SEER 9	-24.5	-1.2*
	Female	NJ	-16	-0.7*
		SEER 9	-21.8	-0.9*
Larynx	**Male**	NJ	-49.7	-2.3*
		SEER 9	-45	-2.2*
	Female	NJ	-34.8	-1.7*
		SEER 9	-26.9	-1.4*

* Statistically signifantly decrease
** Statistically signifantly increase

References

[1]Cancer Prevention & Early Detection – Facts and Figures, 2011, American Cancer Society. Available at http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-029459.pdf

[2]Smoking and Tobacco Control Monograph 8: Changes in Cigarette-Related Disease Risks and Their Implications for Prevention and Control (February 1997), National Cancer Institute. Available at http://cancercontrol.cancer.gov/tcrb/monographs/8/index.html

[3]Tobacco Outlook, October 24, 2007, United States Department of Agriculture. Available at http://usda.mannlib.cornell.edu/usda/ers/TBS//2000s/2007/TBS-10-24-2007.pdf

[4]Smoking and Tobacco Use – Consumption Data, Centers for Disease Control and Prevention. Available at http://www.cdc.gov/tobacco/data_statistics/tables/economics/consumption/