

Funding: National Cancer Institute (NCI) grants U01CA199284, U01CA253858, U54CA229974, and the Intramural Research Program of the NCI

Background

- Impact of cigarette smoking on mortality is well-studied, with estimates of the relative mortality risks for the overall population widely available
- However, age-specific mortality estimates for different sociodemographic groups in the U.S. are lacking

Methods

Mortality Data: 1987–2018 National Health Interview Survey Linked Mortality Files through 2019

- Outcomes:** 1) Age- and gender-specific relative risks(RRs) of all-cause mortality for current smokers or recent quitters (within the last 2 years) or long-term quitters vs. never smokers by race/ethnicity & education
 2) RRs by number of cigarettes smoked per day (CPD) among current smokers or recent quitters
 3) RRs by years since quitting among long-term quitters

Analysis: Cox proportional hazards regression models

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Relative Mortality by Smoking Status for Different Sociodemographic Groups

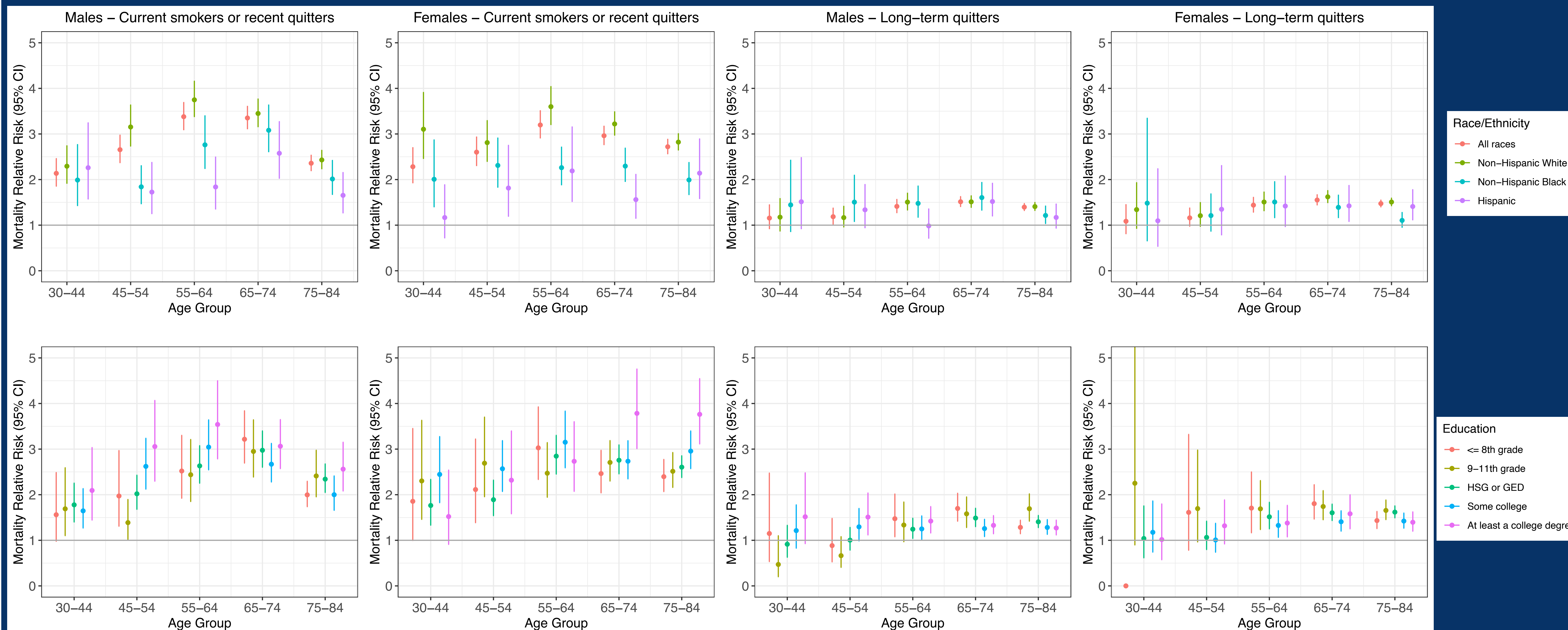
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Results

Demographic Characteristics in Cigarette Use Groups (1987–2018 NHIS)

	Race/Ethnicity (%)				Education (%)				
	NH-White	NH-Black	Hispanic	NH-Other	≤ 8 th	9-11 th	HSG or GED	Some college	At least a college
Never smoker	67.2	12.1	6.5	14.2	6.8	5.6	27.2	25.1	35.3
Current smoker or recent quitter	76.2	12.2	3.5	8.1	6.4	12.7	40.1	27.7	13.1
Long-term quitter	81.8	7.2	3.1	7.8	6.1	7.3	30.8	28.2	27.6

Relative risks of all-cause mortality by age group, race/ethnicity, education



Results

- Higher proportion of non-Hispanic (NH)-Black individuals in current smokers or recent quitters versus long-term quitters
- Lower proportion of individuals with at least a college degree in current smokers/recent quitters
- Highest all-cause mortality RRs for current smokers or recent quitters in NH-White individuals, followed by NH-Black and then Hispanic individuals
- A positive gradient in all-cause mortality RRs for current smokers or recent quitters by educational attainment level
- No clear pattern in all-cause mortality RRs for long-term quitters by race/ethnicity and education

Conclusions

- Age-specific all-cause mortality rates associated with smoking vary considerably by sociodemographic factors
- **Smoking-related mortality RRs are lower in Hispanic and NH-Black individuals compared to NH-White individuals and increase by level of educational attainment**
- **RRs from the current analysis will be incorporated into simulation models for smoking and related health outcomes**