

# The Multiethnic Cohort Study

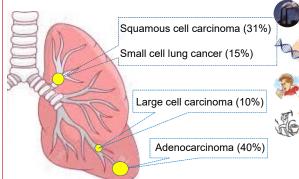
**Lung Cancer** 

# USC University of Southern California

### What is Lung cancer?

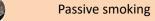
- Lung cancer is the abnormal growth of cells in one or both lungs.
- It is the second most common cancer in men and women, after prostate and breast, respectively.
- Lung cancer causes more deaths than any other cancer site.

## Lung cancer has four major subtypes



#### What are the risk factors?

Smoking/tobacco





Radon gas

Nauon gas

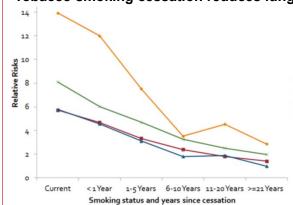
Air pollution

Family history/genetics

Other lung diseases (e.g. tuberculosis, COPD)

Occupation (e.g. miners, heavy metal workers)

### Tobacco smoking cessation reduces lung cancer risk in all populations

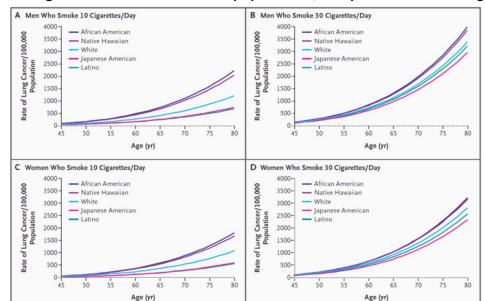


- Lung cancer risk reduction can be observed in just <1 year of quitting smoking.
- After >20 years of smoking cessation, lung cancer risk can be reduced by >10-fold.
- The racial/ethnic differences in risk found in current smokers is dramatically reduced after >20 years of quitting

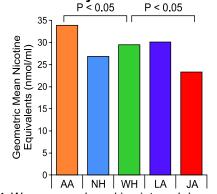
We thank the MEC study participants for their time and dedication.

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## Lung cancer risk differs across populations, independent of smoking



# In the MEC, smoking internal dose, per cigarette, differs by race/ethnicity



We measured smoking internal dose per cigarette in a subset of MEC participants. African Americans have the highest dose per cigarette. Native Hawaiians have a low dose per cigarette; however, remain at high risk of disease.

#### What can I do?

#### **Prevention:**

- > Do not use tobacco.
- > If you currently smoke, quit smoking
  - ➤ 1-800-QUIT-NOW
  - https://hawaiiquitline.org

#### Screening:

- ➤ If you are 55 to 80 years with a 30 pack-year smoking history and currently smoke or have quit within the past 15 years, get screened annually with low-dose computed tomography scans.
- Screening facilities are available at:
  - Hawaii Pacific Health
  - Kaiser Permanente Hawaii
  - · Queens Hospital