The Kentucky Lung Cancer Screening Excellence Project

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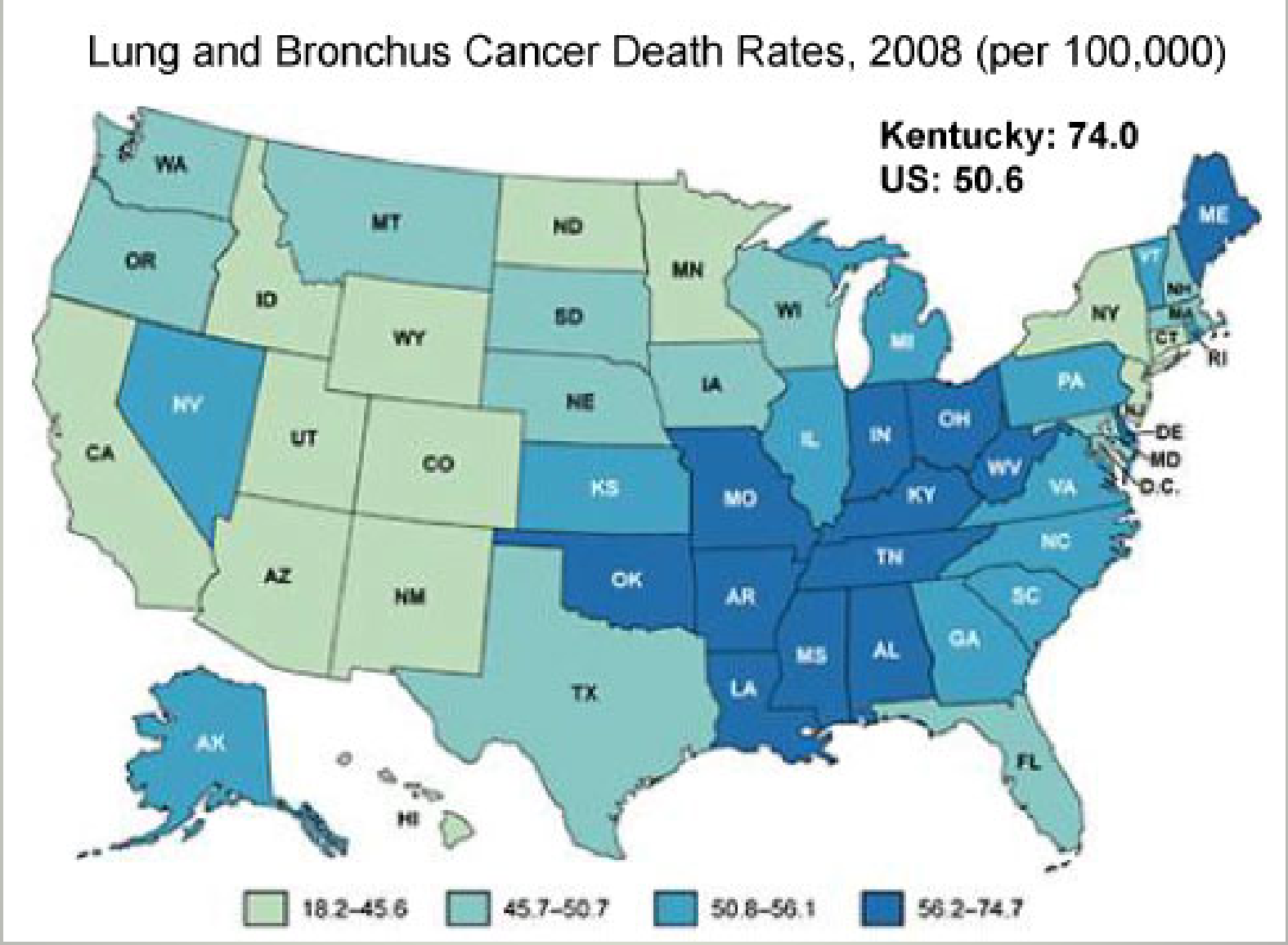
Markey Cancer Center

WE ARE #1.


Lung and Bronchus Cancer Death Rates, 2008 (per 100,000)
Kentucky: 74.0
US: 50.6
WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
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IN
KY
TN
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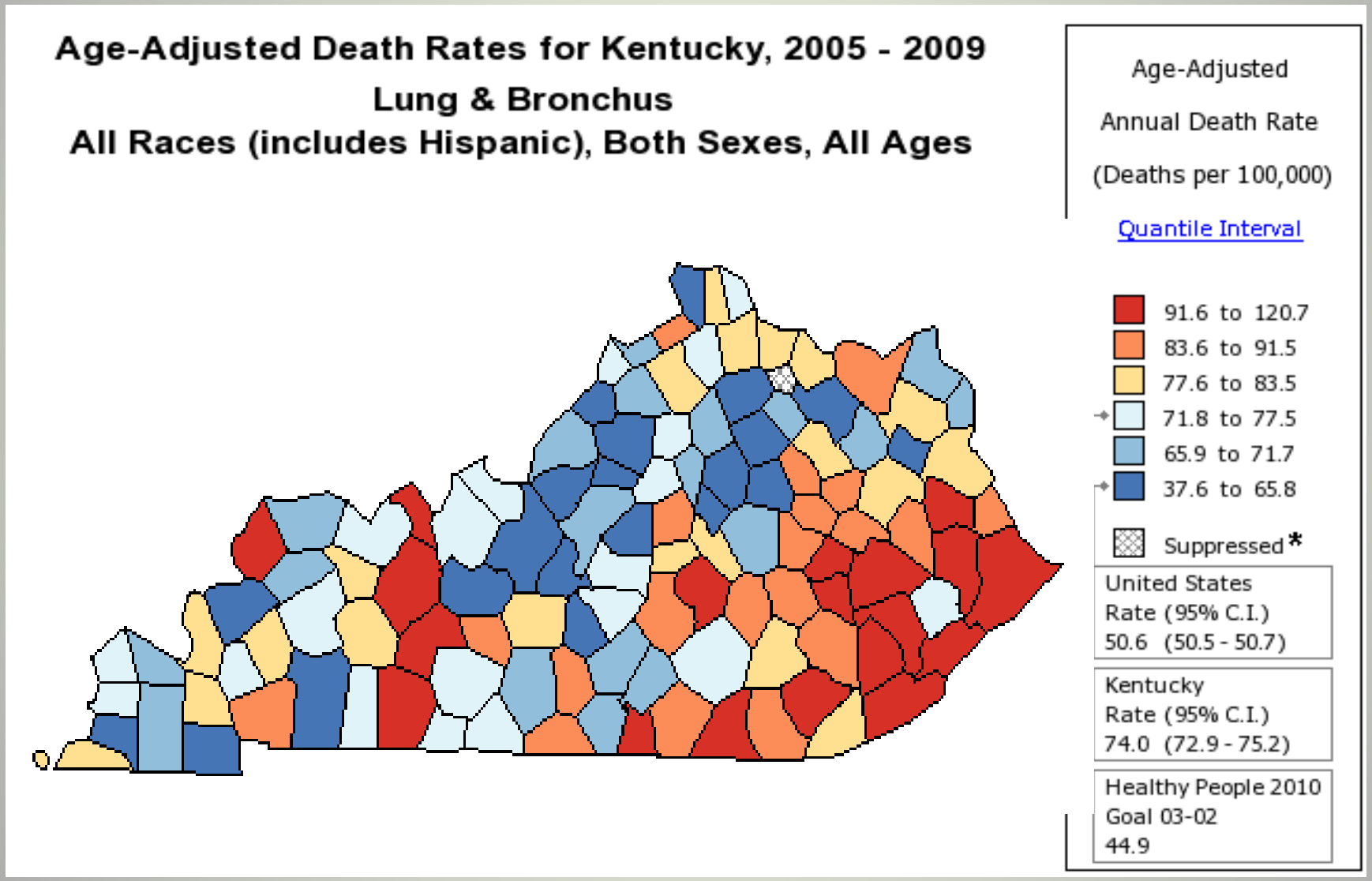
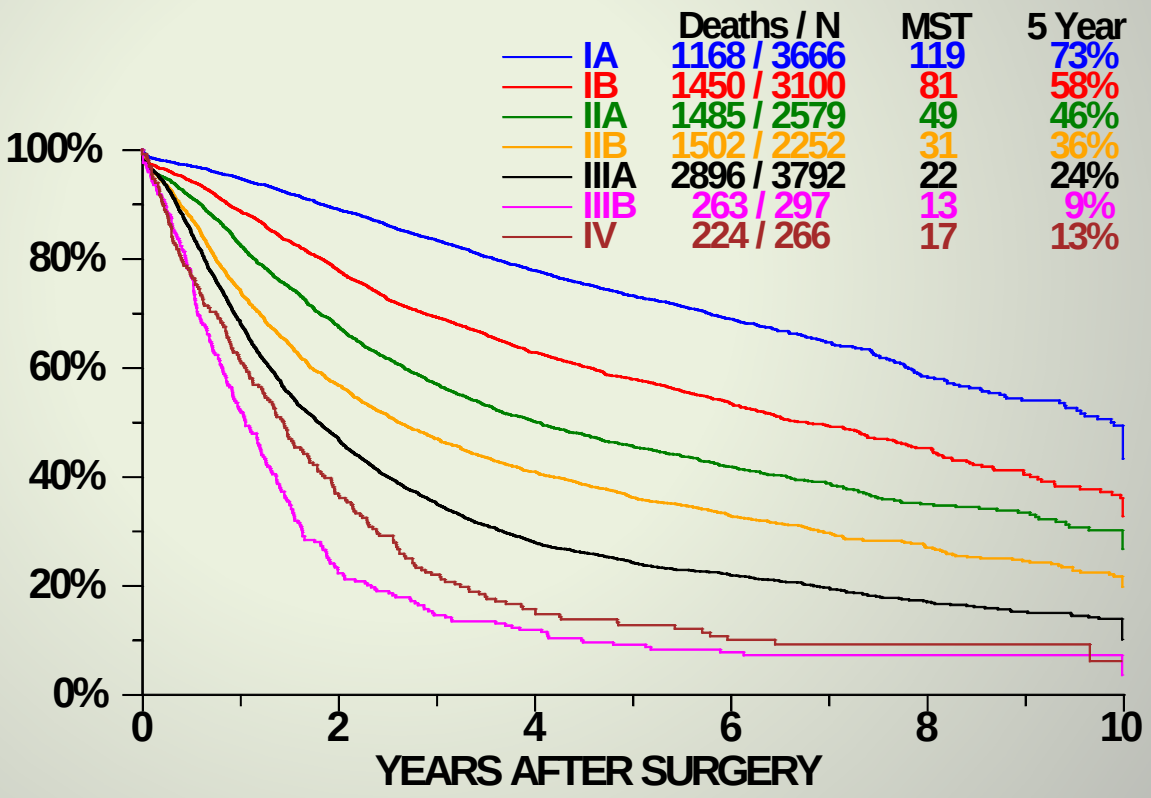
OH
WV
GA
FL
SC
NC
VA
PA
NY
ME
VT
NH
MA
CT
RI
DE
MD
D.C.
AK
HI
18.2–45.6
45.7–50.7
50.8–56.1
56.2–74.7

A land of opportunity…



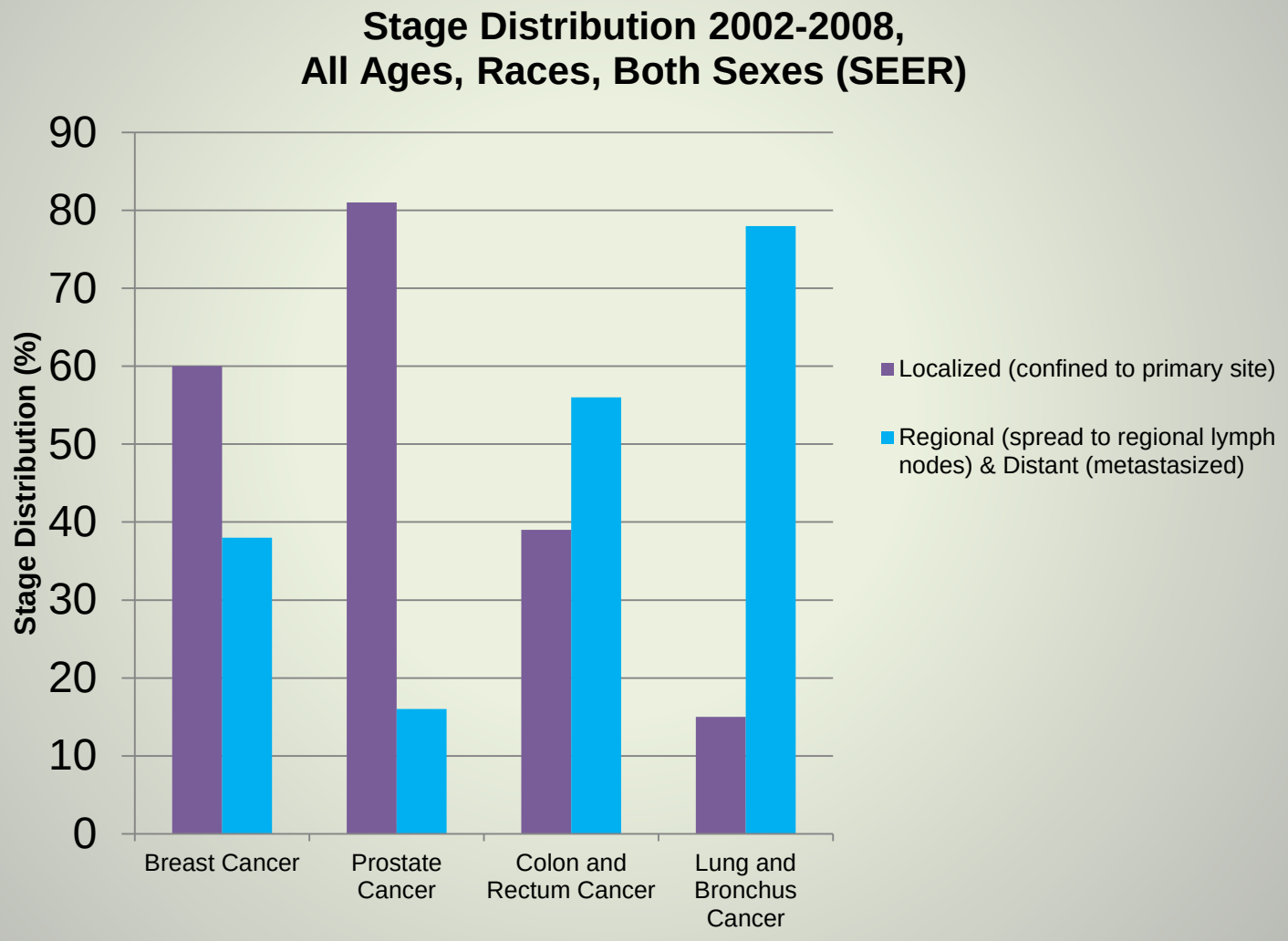
To cure more lung cancer, we need to detect it in early stages, when curative therapies exist.

Overall Survival, as Median Survival Time (MST) and 5-year Survival by Pathological Stage (AJCC v7).

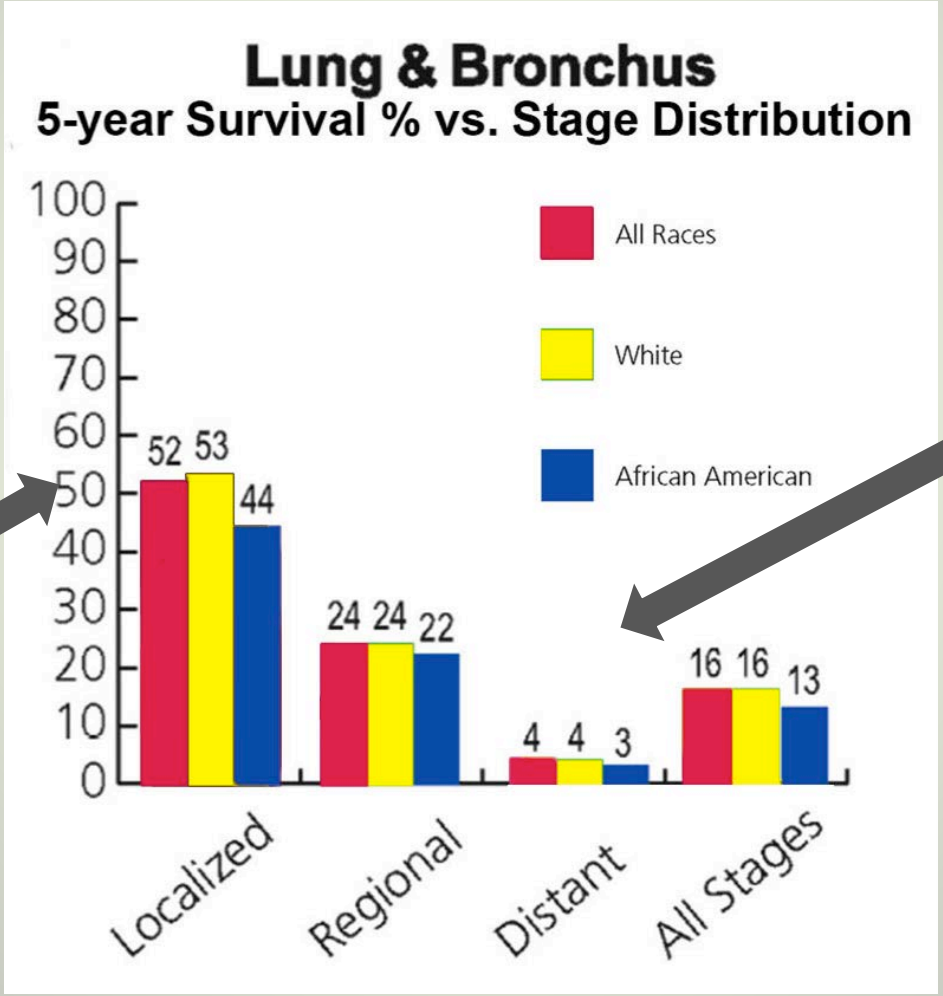


From: Goldstraw P, Crowley J, Chansky K et al. The IASLC lung cancer project: proposals for the revision of the TNM stage groupings in the forthcoming (seventh) edition of the TNM classification of malignant tumours. J Thorac Oncol 2007; 2: 706-714

More than 75% of lung cancers are diagnosed in advanced stages.



The prognosis for advanced stages is poorer than earlier stages.



Localized Stages have improved survival

Regional & Distant Stages have worst survival

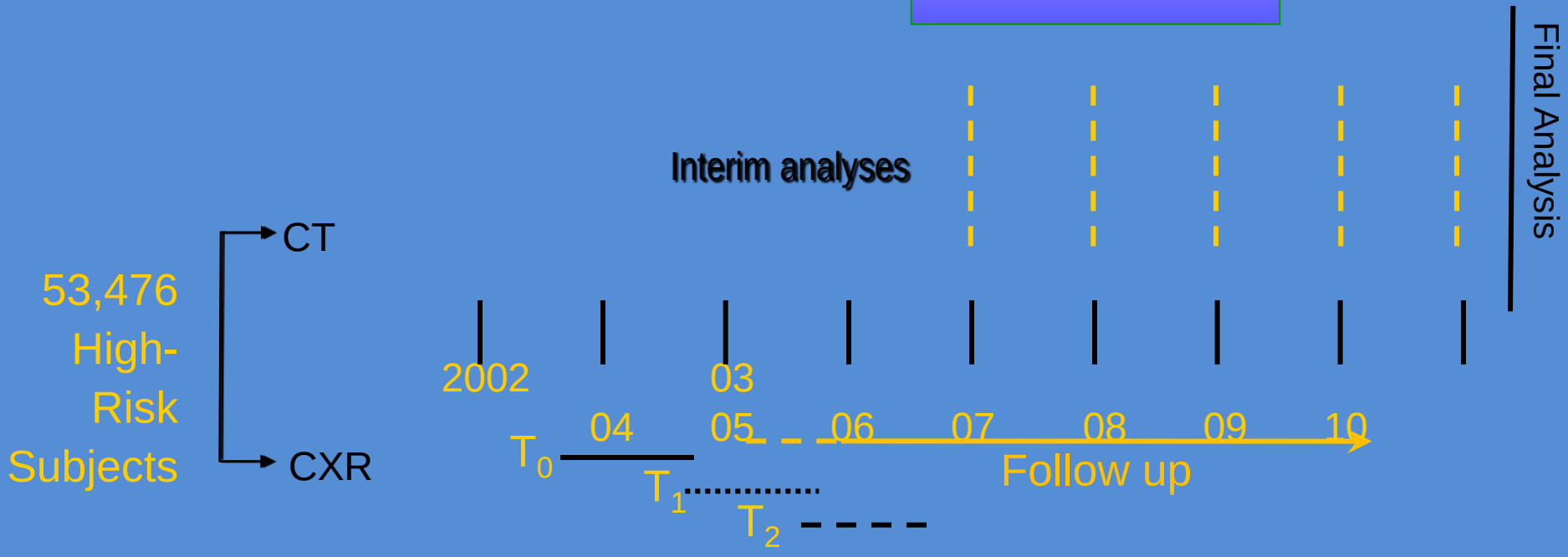
Standardized Eligibility

- Males | Females
- 55-74 Yrs
- Asymptomatic
- Current or *former* smokers ≥ 30 pack yrs
- Former smokers have quit within ≤ 15 yrs
- No prior *lung* cancer
- *No* cancer within past 5 yrs
- No chest CT w/in prior 18 months

NLST design and time posts

- RCT
- 1:1 randomization to CT or CXR
- Launched in 08-2002 across ~ 33 sites

National Lung Screening Trial
National Cancer Institute



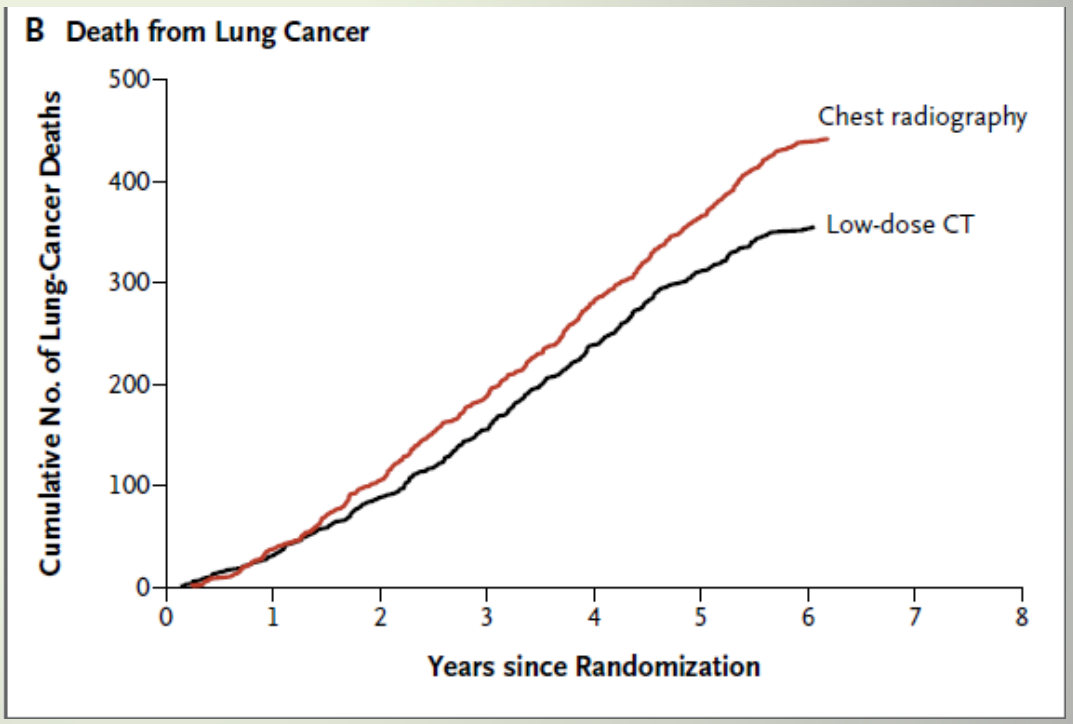
The largest randomized lung cancer screening trial completed, indicates screening high-risk populations saves lives.

NLST:

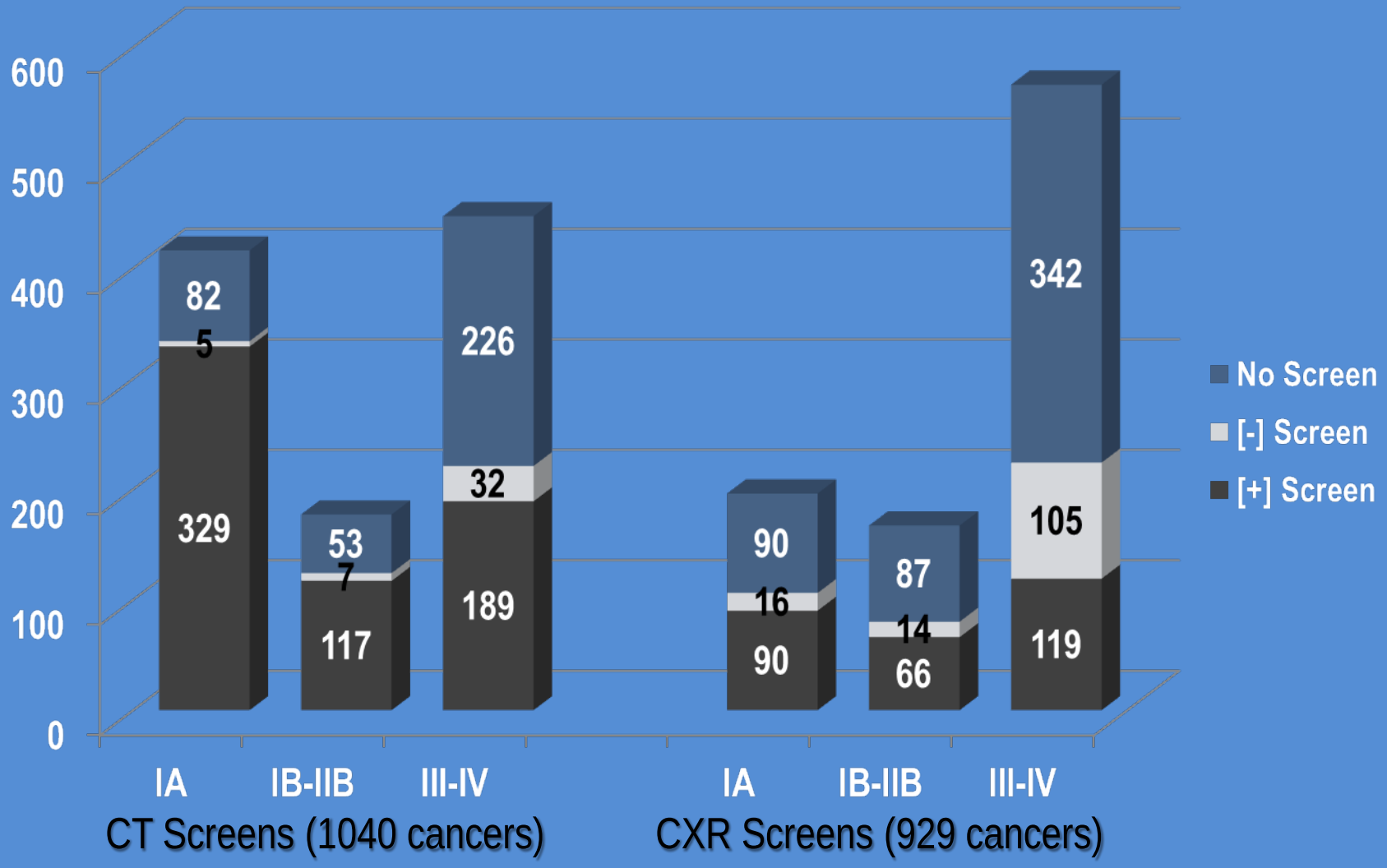
Screening High-Risk Populations = 20% Reduction in Lung Cancer Mortality

High Risk = current or former (≤ 15yrs quit) heavy smokers (≥ 30 pk/yrs), aged 55-74

24% of CT scan group had a positive scan (> 4 mm non-calcified nodule)



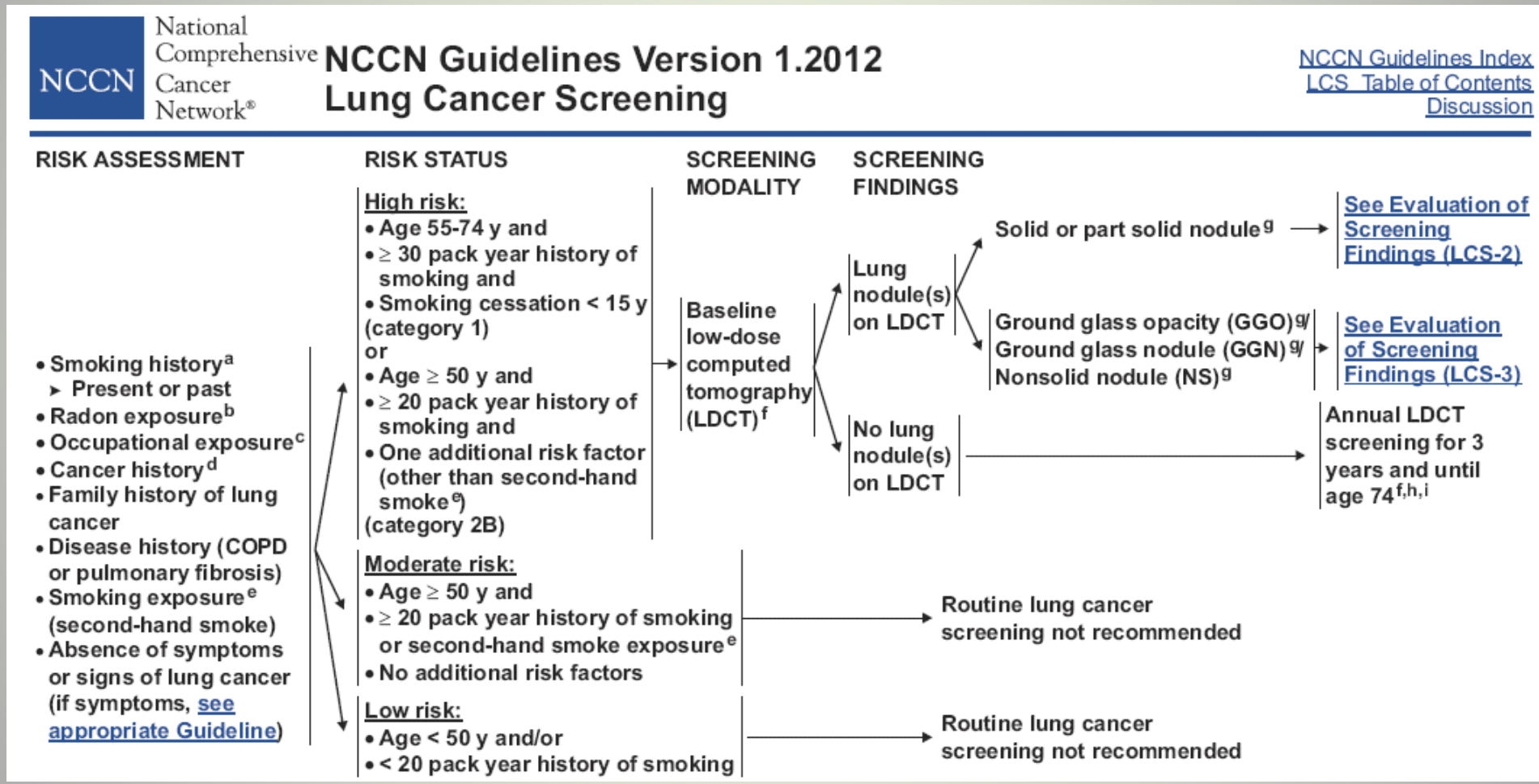
stage distribution for lung cancers by screen status



Summary

- More CT-detected lung cancers than CXR
  - CT: 649 CT-detected | 44 Negative screen | 367 NO screen = 1060
  - CXR: 279 CXR-detected | 137 Negative screen | 525 NO screen = 941
- True stage shift observed in CT arm
- 20% lung cancer mortality reduction CT vs. CXR
  - Absolute risk reduction = 0.4% (AR CT= 1.3% | CXR = 1.7%)
- 6.7% all cause mortality reduction with CT vs. CXR
- Few major complications

The National Comprehensive Cancer Network recommends lung cancer screening.



http://www.aboutcancer.com/lung_cancer_screen.htm

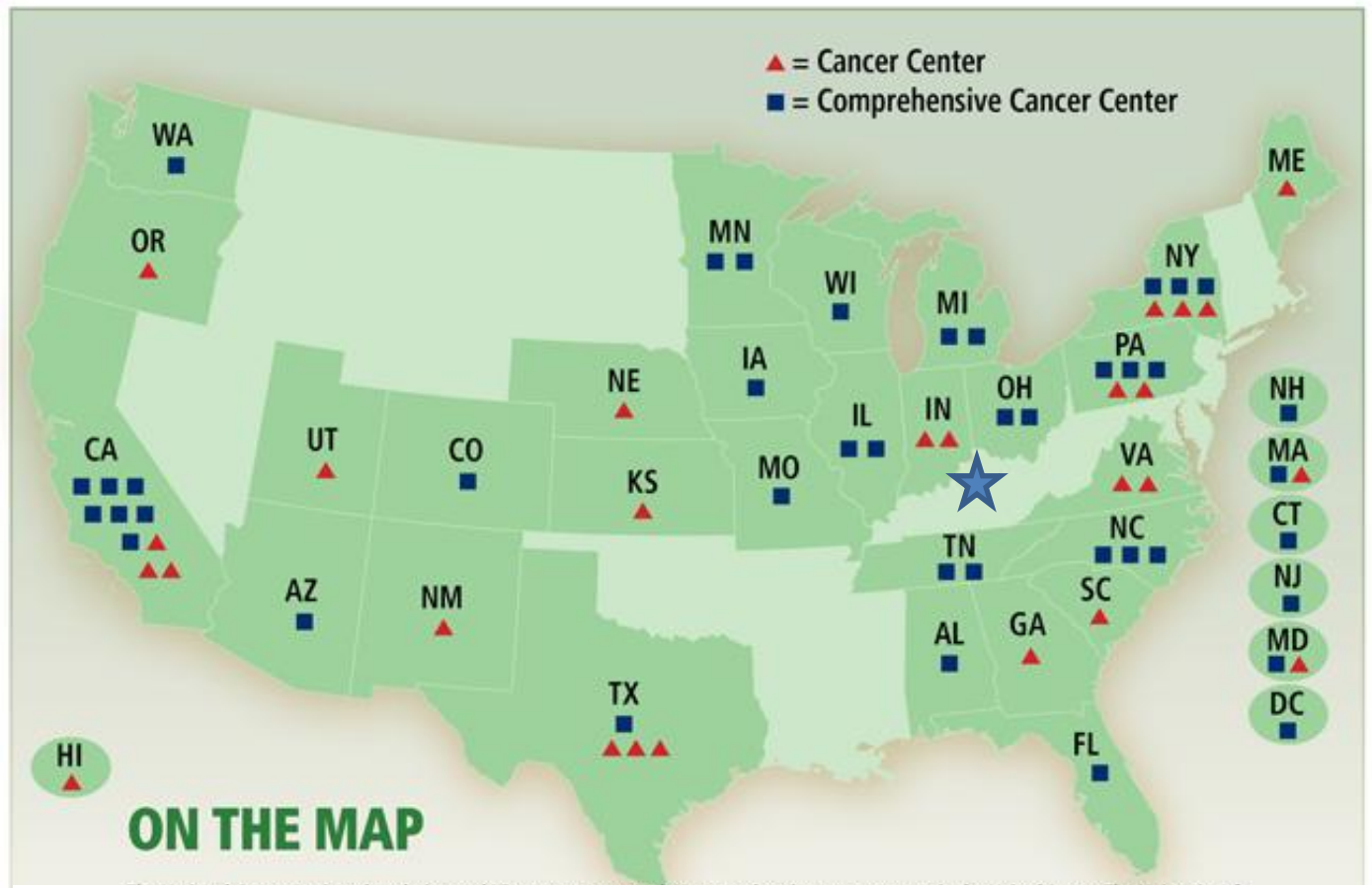
All NCI designated cancer centers are operating lung cancer screening programs and many include research.

NCCN Guidelines:

high-risk populations screened in specific manner

with defined measures

Multidisciplinary expertise



All NCI-designated Cancer Centers have lung cancer screening programs.

KLCRP Lung Cancer Screening Excellence Project will improve early detection of lung cancer, which will increase survival rates of Kentuckians.

Phase I

- Survey practitioners and centers about presence of current lung cancer screening programs and awareness of value of screening
- Prospective collection of observations of current screening programs

Phase II

- Implement quality, community-based Kentucky Lung Cancer Screening Project
- Establish Screening Centers of Excellence
- Establish Referral Centers of Excellence
- Ongoing monitoring of quality standards, multidisciplinary care to ensure optimal outcomes

Lung Cancer Screening will save lives of Kentuckians.

KLCRP Screening Centers of Excellence

- Complies with NCCN Guidelines
- Patient Navigator
- Provides smoking cessation
- Communicates results to patients
- Electronically reports data for central recording

RadiologyInfo.org

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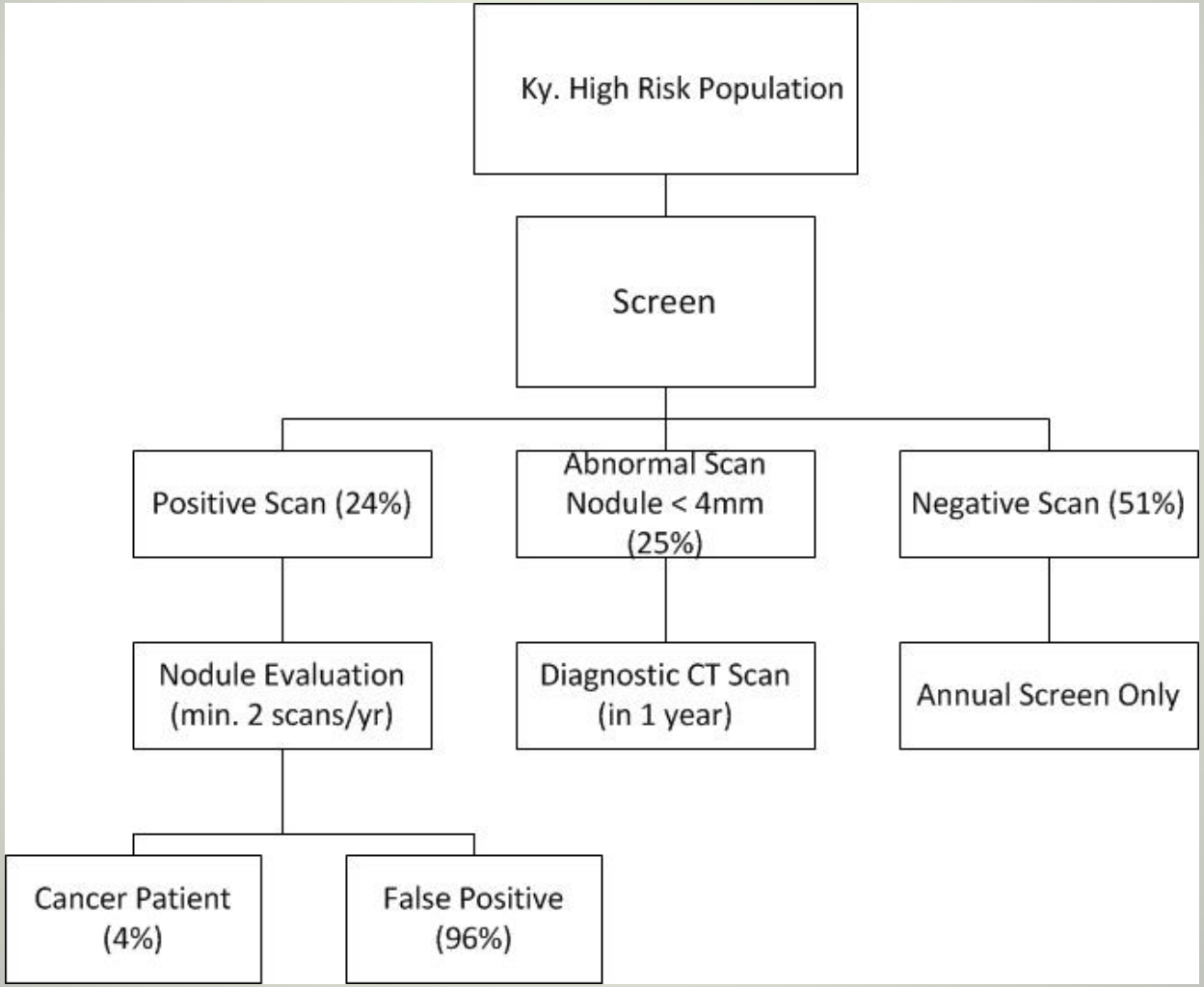


KCTN Lung Cancer Screening Excellence Study will Improve Cancer Care.

Participation in the study will require a site to participate in programs of multidiciplinary care.

- Pulmonary Med
- CT Surgery
- Med Oncology
- Rad Oncology
- Pathology
- Radiology

Referral Excellence Centers will be defined

Courtesy of the National Cancer Institute. Teresa Winslow (artist).

Engagement of partners outside research are important factors to success.

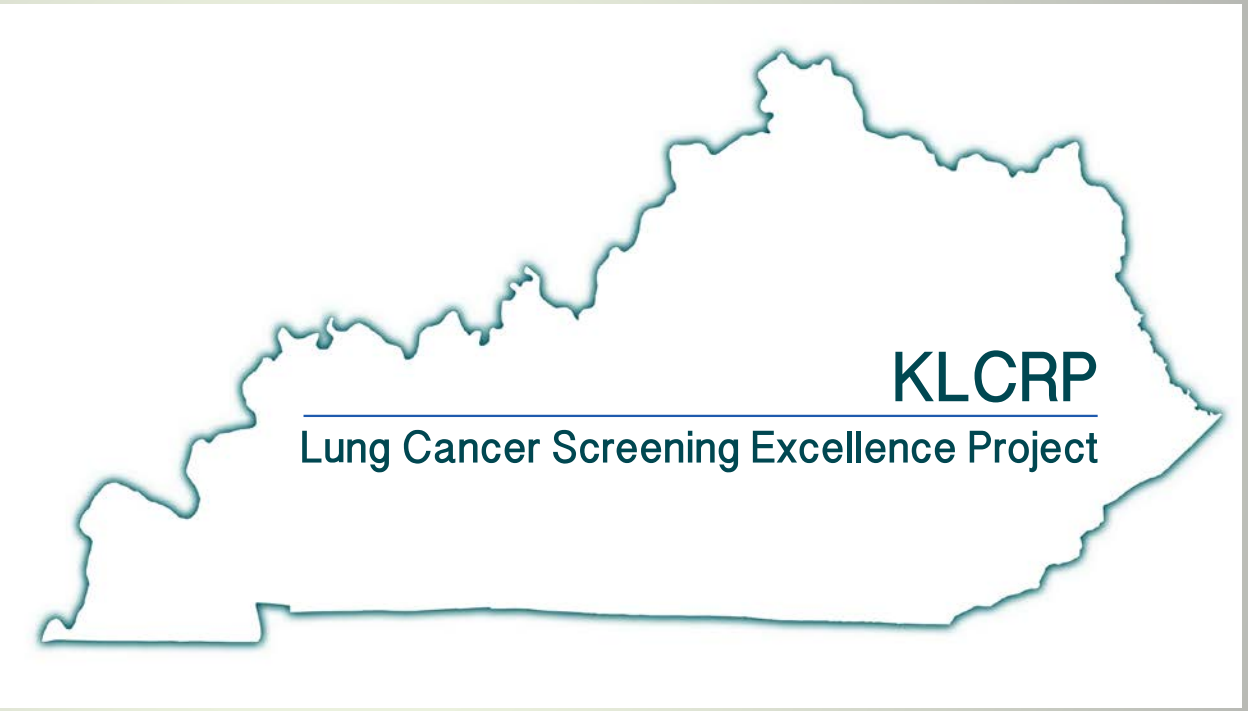
Community

Primary Care

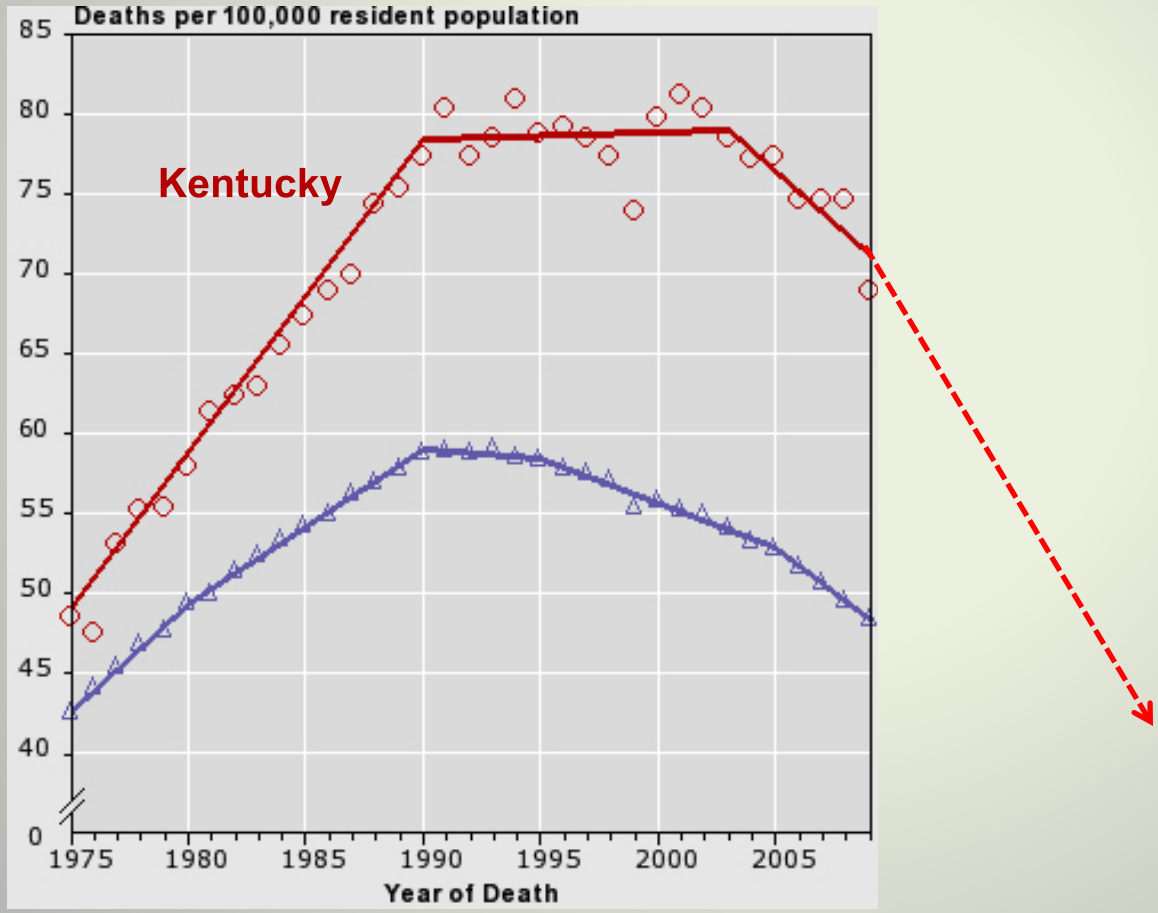
Synergistic Partners

Clinical Research

Markey Cancer Center



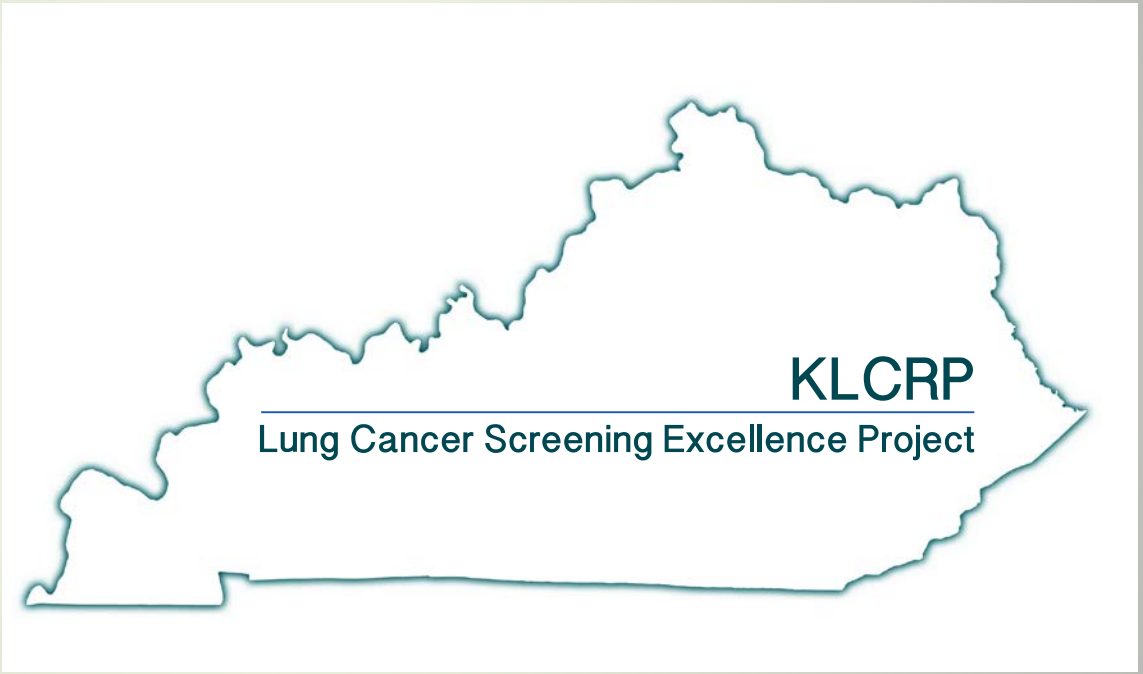
The devastating impact of lung cancer in Kentucky is static over decades. The KLCRP Screening Excellence Project is a component to a solution.



Historical Trends in Mortality Rates (1975-2009)

Statewide Lung Cancer Screening can begin as a research project…but it doesn't have to end there…

- Research Funding
  - Initial funding by KCTN
  - Future KLCRP Funding
    - Cycle grants
    - Special Project
- Statewide Database
- Continuing Education
- Broader Acceptance by third-party payers



KLCRP is charged with the mission to reduce mortality of lung cancer in Kentucky.

Expertise

Collaborative Efforts

UKHealthCare
Markey Cancer Center