

KENTUCKY SETTING THE BAR **LUNG CANCER SCREENING AND AWARENESS**

KY LCSP

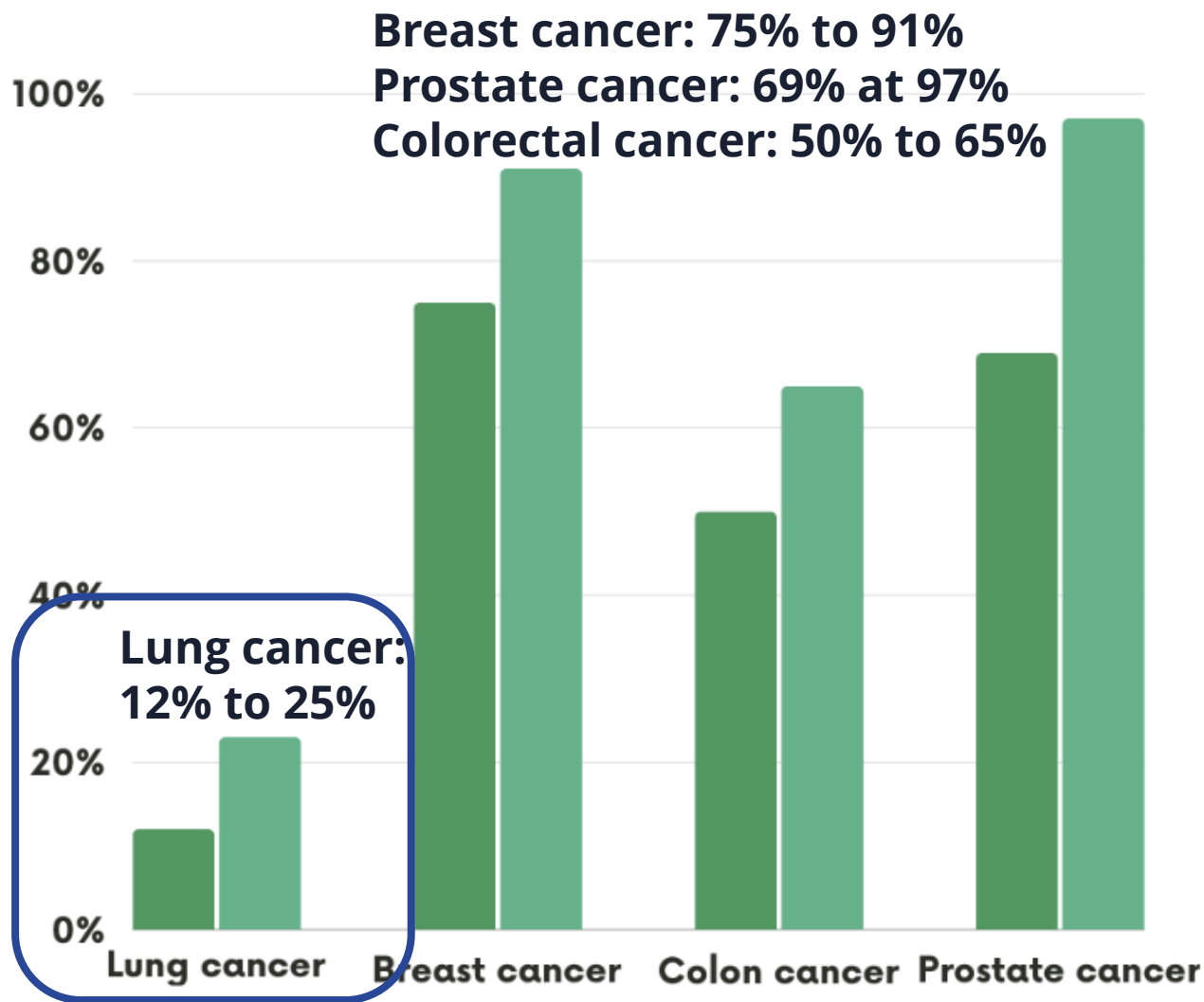
KY LCSP

Interim Joint Health Services Committee

Michael Gieske, MD
Director Lung Cancer Screening
Physician Advisor Advocacy

October 23, 2024

HOW LUNG CANCER STACKS UP



5-year survival rates for lung, breast, colon, and prostate cancer from 1970 to current day, 2023

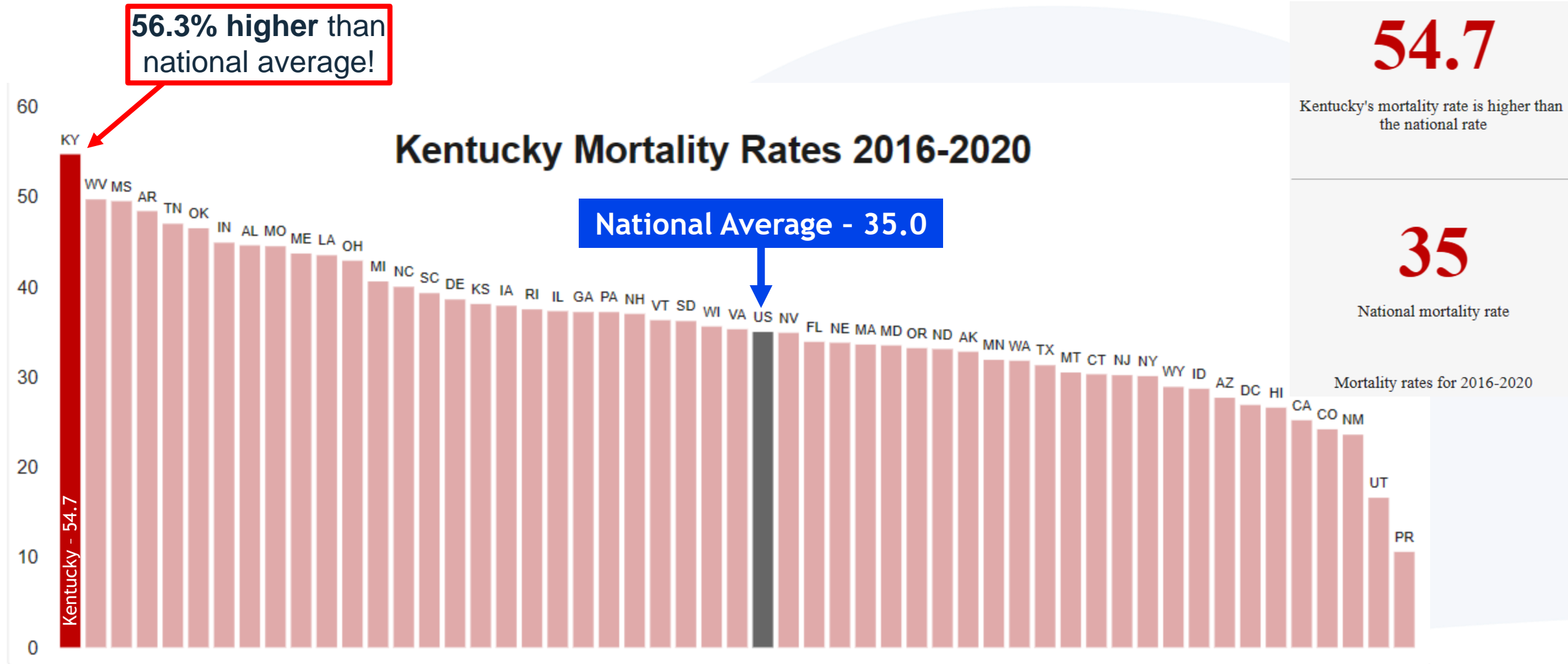
Yet federal funding significantly trails that for breast, colon and prostate cancers.



25%	9%	15%	20%
of all cancer deaths are due to lung cancer	of total federal research funding goes to lung cancer	of all cancer deaths are due to breast cancer	of total federal research funding goes to breast cancer

National Institutes of Health. (2020). Estimates of Funding for Various Research, Condition, and Disease Categories. Retrieved from <https://report.nih.gov/funding/categorical-spending#>

LUNG CANCER MORTALITY RATES – ALL - 2023

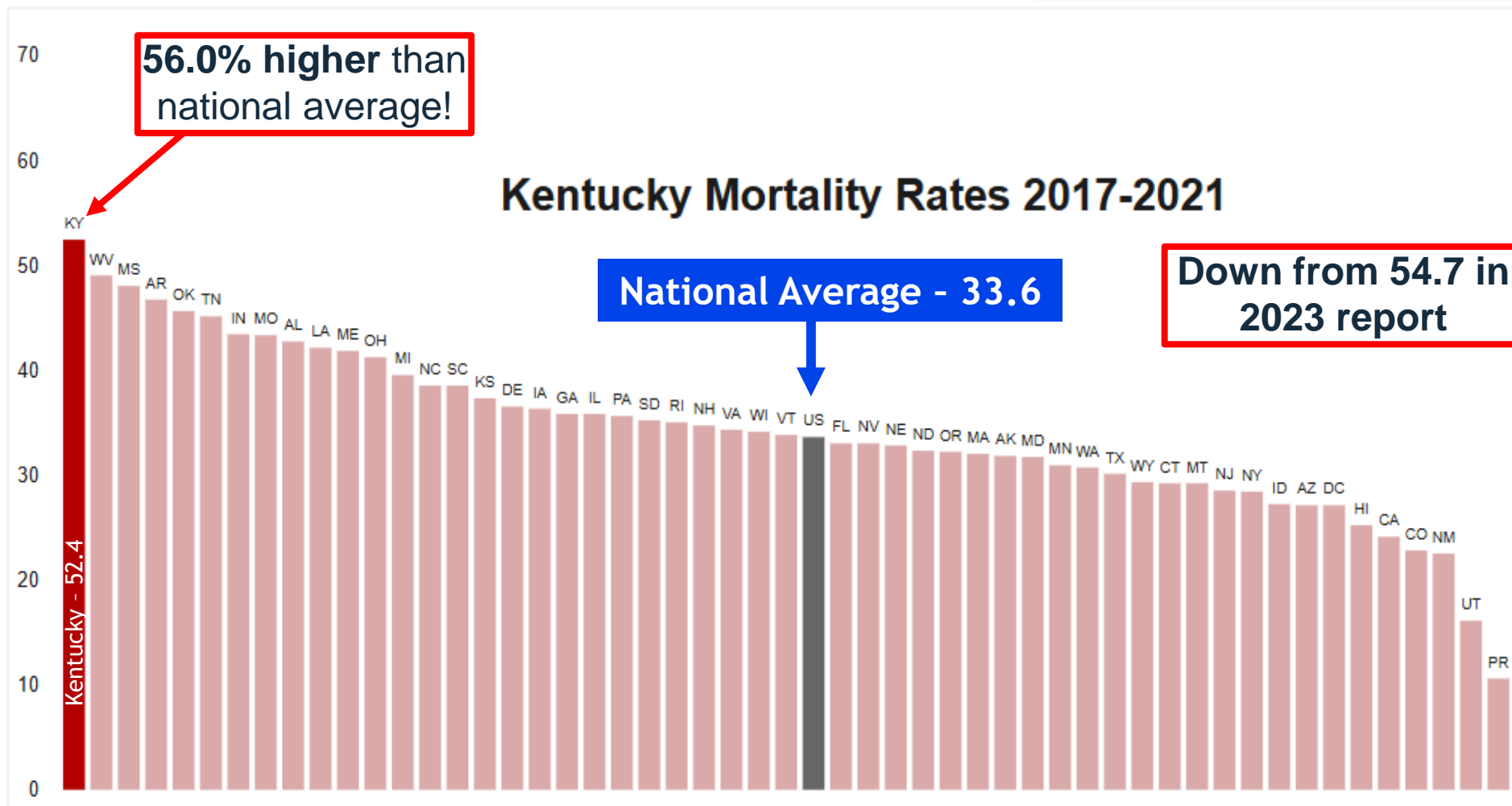


Data Source: National Center for Health Statistics, Centers for Disease Control and Prevention, 2022

American Cancer Society, 2023

Average annual rate per 100,000, age adjusted to the 2000 US standard population.

LUNG CANCER MORTALITY RATES – ALL - 2024



How does Kentucky compare?

52.4

Kentucky's mortality rate is higher than the national rate

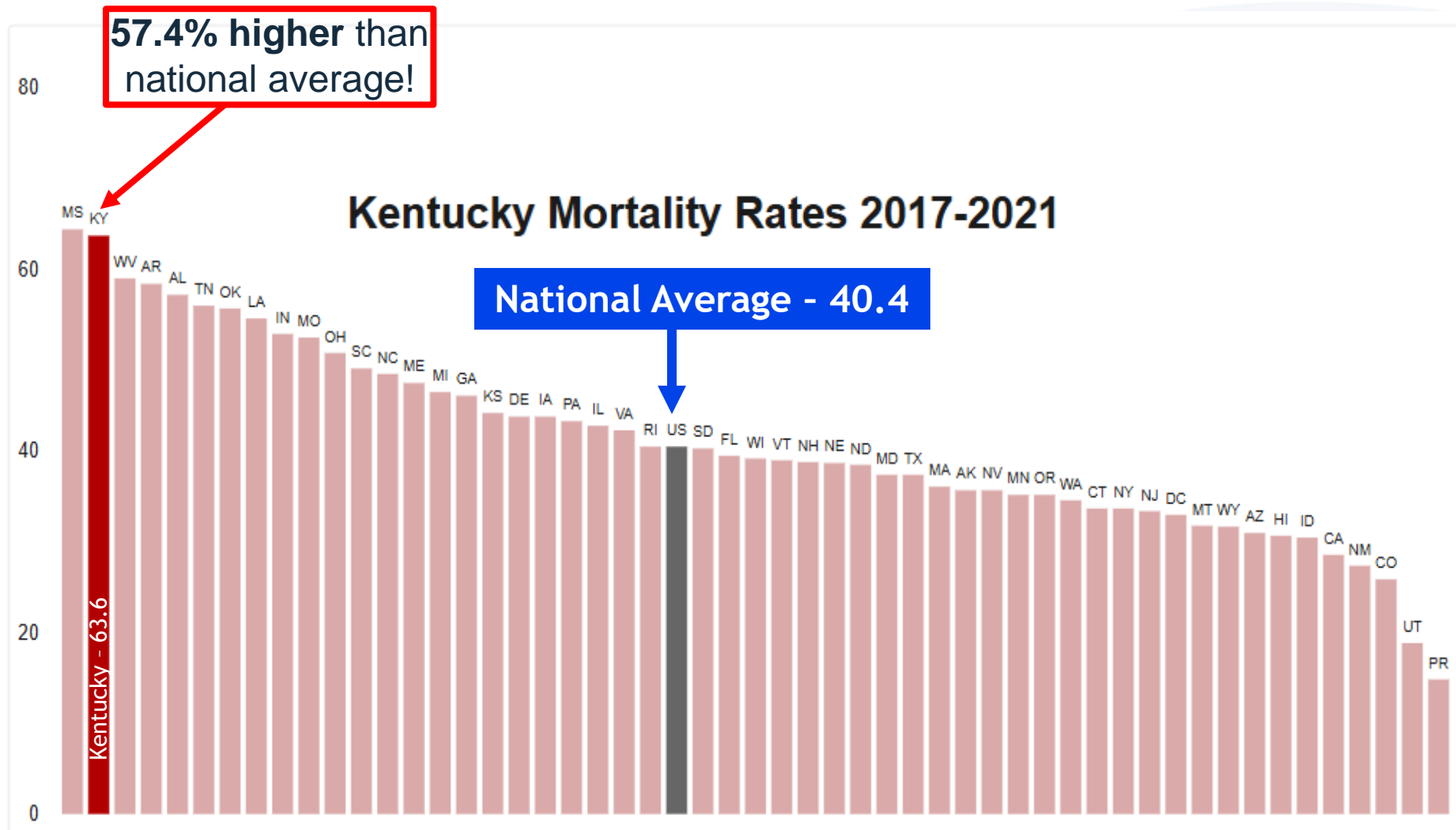
33.6

National mortality rate

Mortality rates for 2017-2021

©American Cancer Society, 2024
Average annual rate per 100,000, age adjusted to the 2000 US standard population.
Data Sources: National Center for Health Statistics, Centers for Disease Control and Prevention, 2022

LUNG CANCER MORTALITY RATES - MALE



How does Kentucky compare?

63.6

Kentucky's mortality rate is higher than the national rate

40.4

National mortality rate

Mortality rates for 2017-2021

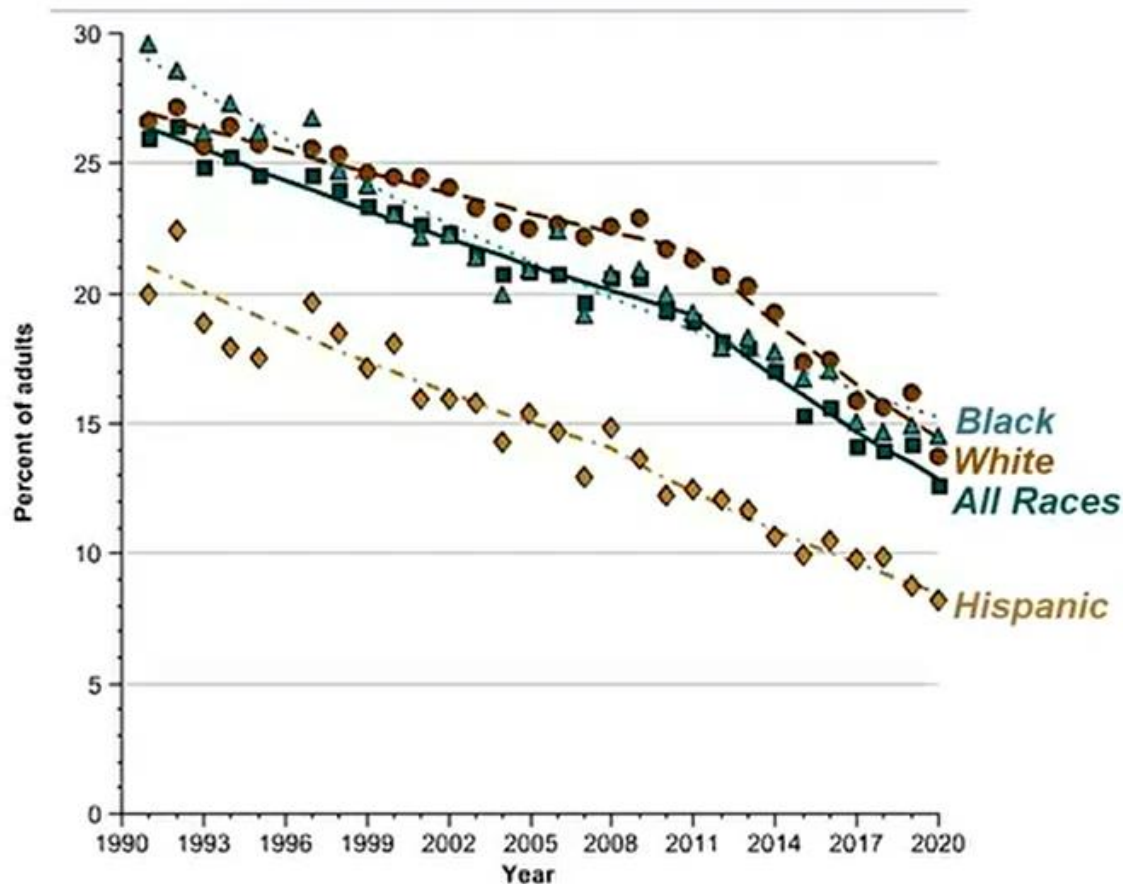
©American Cancer Society, 2024

Average annual rate per 100,000, age adjusted to the 2000 US standard population.

Data Sources: National Center for Health Statistics, Centers for Disease Control and Prevention, 2022

HEALTHY TRENDS – DECLINING SMOKING RATES

Percentage of current cigarette users decreasing over time among U.S. adults (1991-2020)



- Progressive decline in cigarette use across *all* racial/ethnic groups
- This decline is associated with **reduced risk for cancer** – and other diseases

RACE DISPARITIES RESOLVING – LUNG CANCER MORTALITY

Lung cancer mortality trends in the U.S.

Disparity between Black and White populations has gradually been eliminated

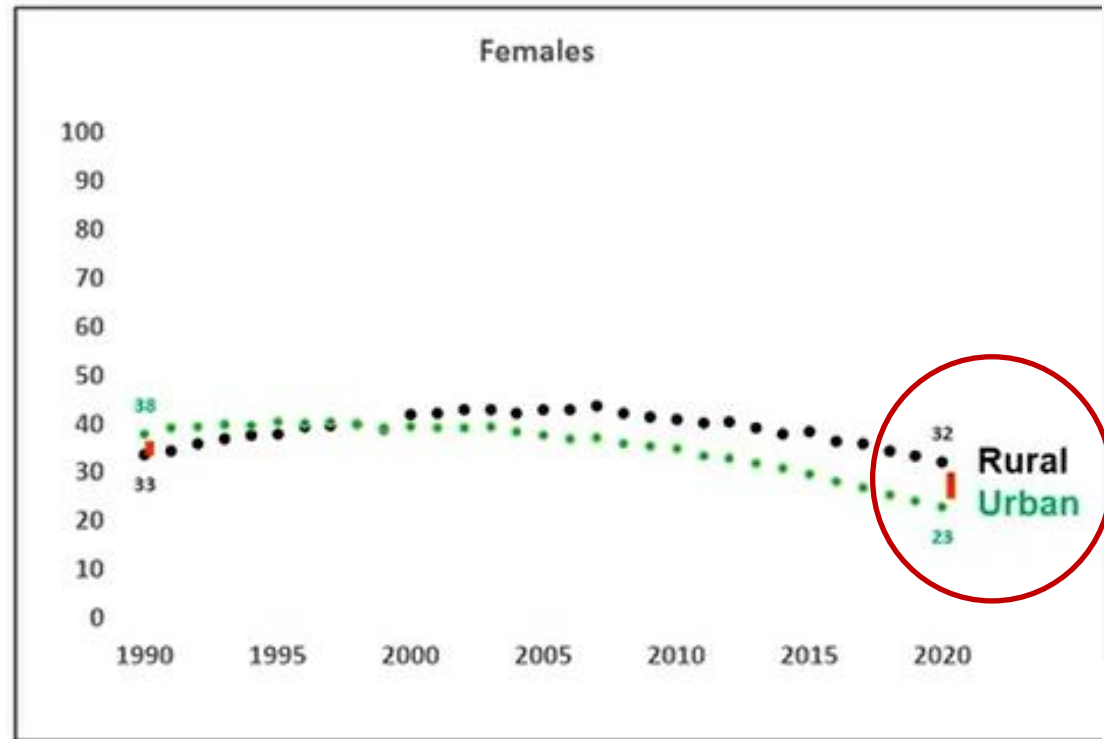
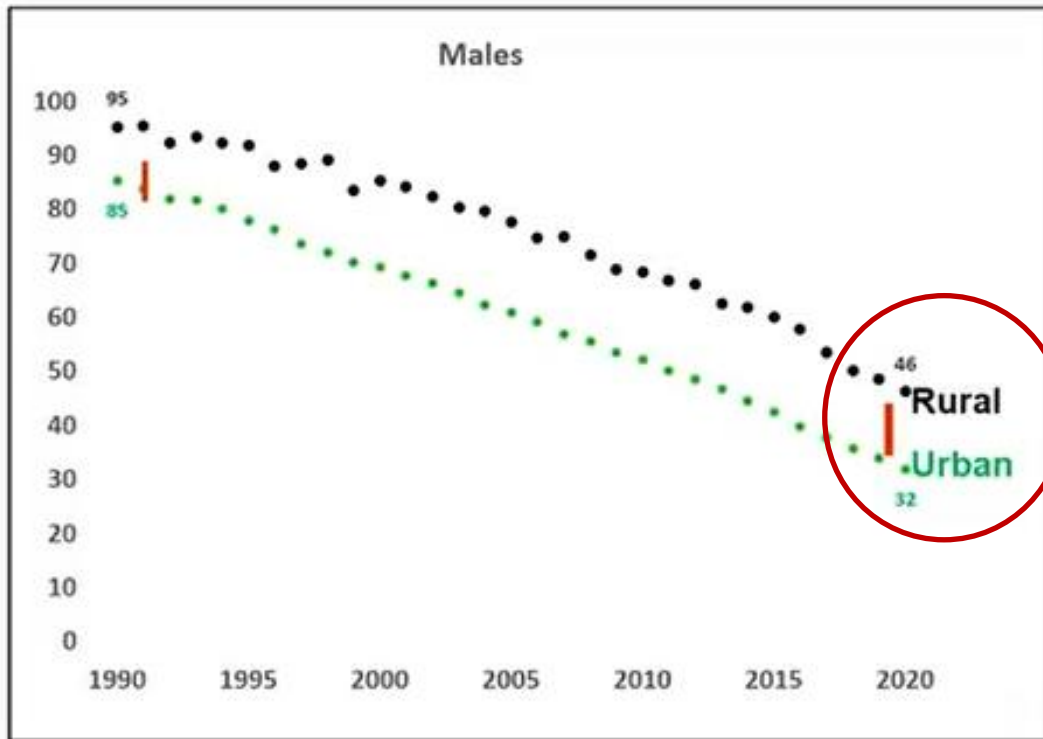


Howlader et al, submitted

DISPARITIES PERSIST IN RURAL POPULATIONS – LC MORTALITY

Lung cancer mortality trends in the U.S.

Disparity has increased between rural and urban populations



Howlader et al, submitted

KENTUCKY ON THE WORLD STAGE!



2024 World Conference
on Lung Cancer

SEPTEMBER 7-10, 2024 | SAN DIEGO, CA USA

Lung cancer in the USA: Promising trends and remaining gaps

Douglas R. Lowy, M.D.

Principal Deputy Director, National Cancer Institute

2024 World Conference on Lung Cancer

September 7, 2024

 NATIONAL CANCER INSTITUTE

*The views expressed are my own and do not
necessarily reflect those of NCI/NIH.*



Today's Talk

- US and worldwide tobacco consumption
- Impact of advances in lung cancer treatment
- Urban vs. rural disparities
- Lung cancer screening: Kentucky

A lung cancer screening success story: Kentucky

- Kentucky lung cancer rates are the **highest in the U.S.**
- In 2014, Kentucky began a **concerted state-wide effort** to take advantage of lung cancer screening
 - **The Kentucky LEADS Collaborative** (Lung Cancer Education, Awareness, Detection, and Survivorship)
 - Led and coordinated by investigators at the University of Kentucky, University of Louisville, the Kentucky Cancer Consortium and the Lung Cancer Alliance (funded by Bristol-Myers Squibb Foundation)



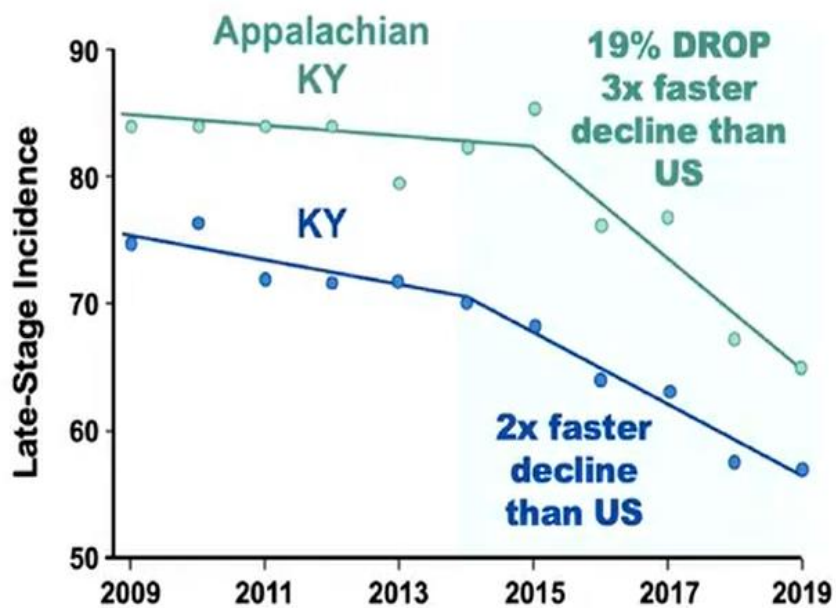
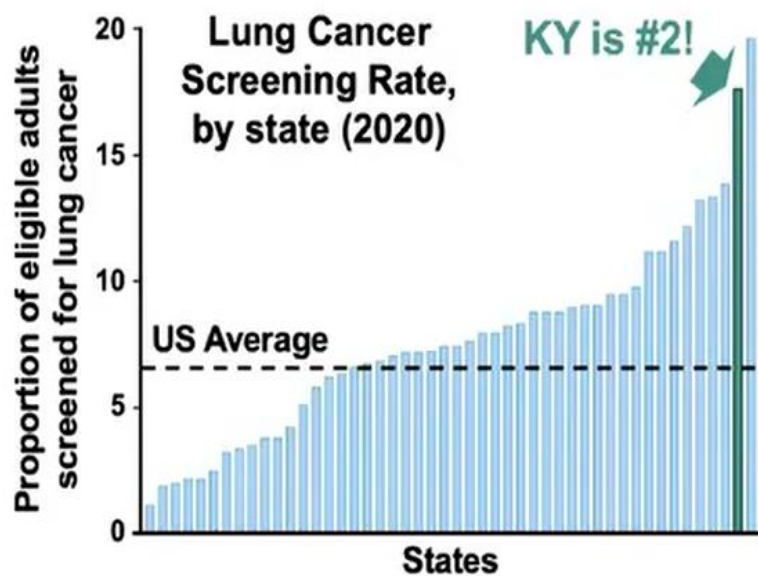
- This has resulted in:
 - ✓ **Substantially higher lung cancer screening rates in Kentucky**
 - ✓ An associated **decrease in late-stage cancer incidence**

More information: Jamie Studts, abstract EP.04A.03

	2010-2014	2018-2022
KY	95	51
U.S.	61	32

Impact of state-wide lung cancer screening in KY

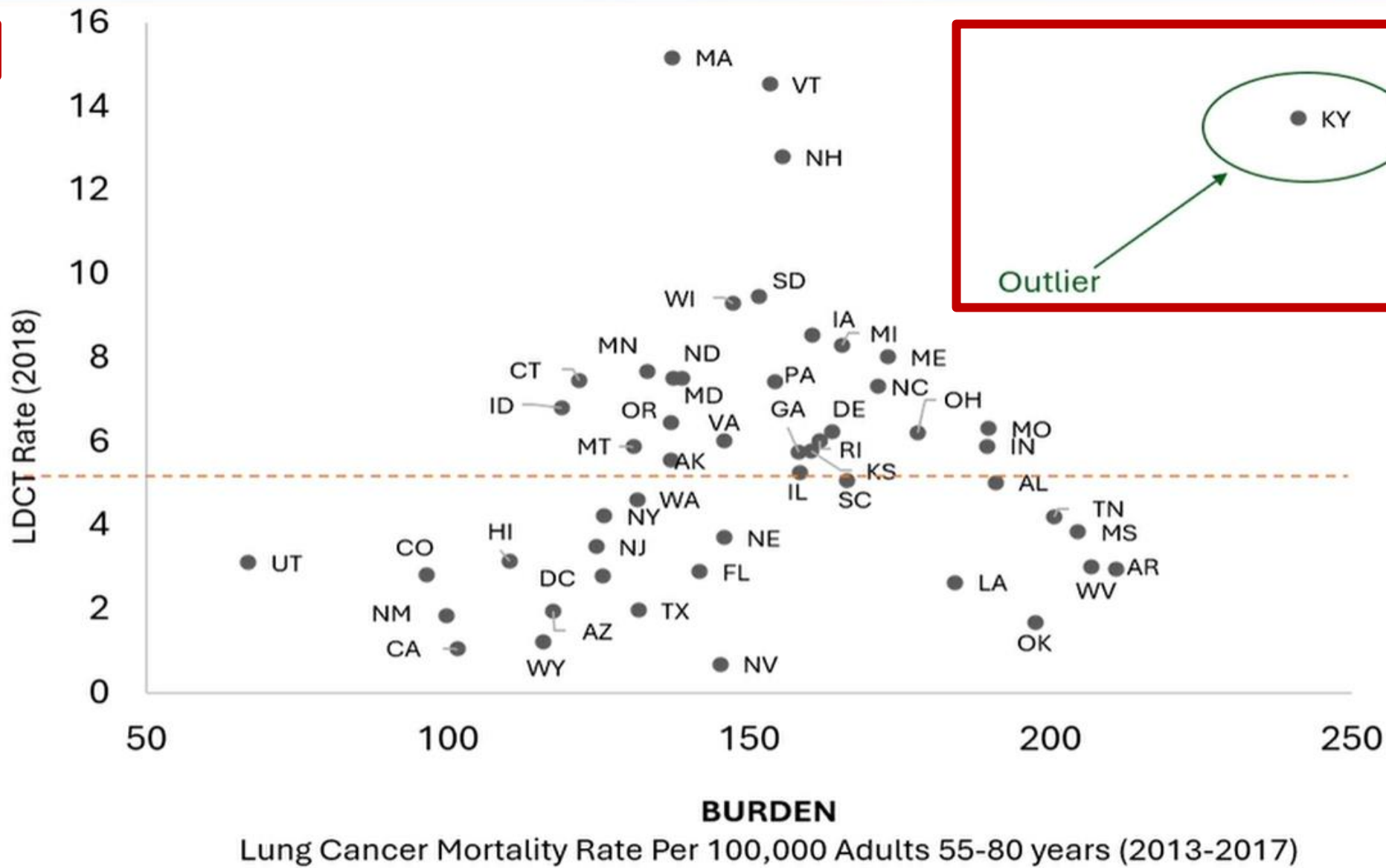
QUILS™ System 1.0 – State-Level Results



Modified from Fedewa et al, JNCI 2020



Dr. Ray Osariogiagban



NARJUST FLOREZ – ACCOLADES FOR KENTUCKY



2024 World Conference
on Lung Cancer

SEPTEMBER 7-10, 2024
SAN DIEGO, CA USA

#WCLC24
03 min 26s
wclc2024.iaslc.org

Standing On The Shoulders Of Giants

- Kentucky LEADS (LEADS = Lung Cancer Education, Awareness, Detection, and Survivorship)
 - High-quality implementation of lung cancer screening throughout Kentucky and evidence-based tobacco cessation interventions in lung cancer control efforts

- University of Chicago: NP Mary Pasquinelli

Outcomes From a Minority-Based Lung Cancer Screening Program vs the National Lung Screening Trial

Mary M. Pasquinelli, MS, APRN¹; Kevin L. Kovitz, MD, MBA²; Matthew Koshy, MD³; et al

> Author Affiliations | Article Information

JAMA Oncol. 2018;4(9):1291-1293. doi:10.1001/jamaoncol.2018.2823



PERFORMANCE OF SEHC LCSP, HISTOLOGY, PY, SEX DISTRIBUTION – 2024 YTD

Overall Lung Cancer Discovery		
Stage - all yrs	N	%
Stage I	449	63.06%
Stage II	73	10.25%
Stage III	120	16.85%
Stage IV	70	9.83%
Unknown	0	0.00%
Total	712	
Stage I & II	73.31%	

73.3% found in early stages

Lung Cancer Type		
Type	N	%
adenocarc.	318	45.0%
squamous	215	30.5%
small cell	76	10.8%
limited	48	
extensive	28	
large cell	12	1.7%
carcinoid	12	1.7%
other	15	2.1%
unknown	58	8.2%
	706	100%

Male	346	48.6%
Female	366	51.4%
	712	100%

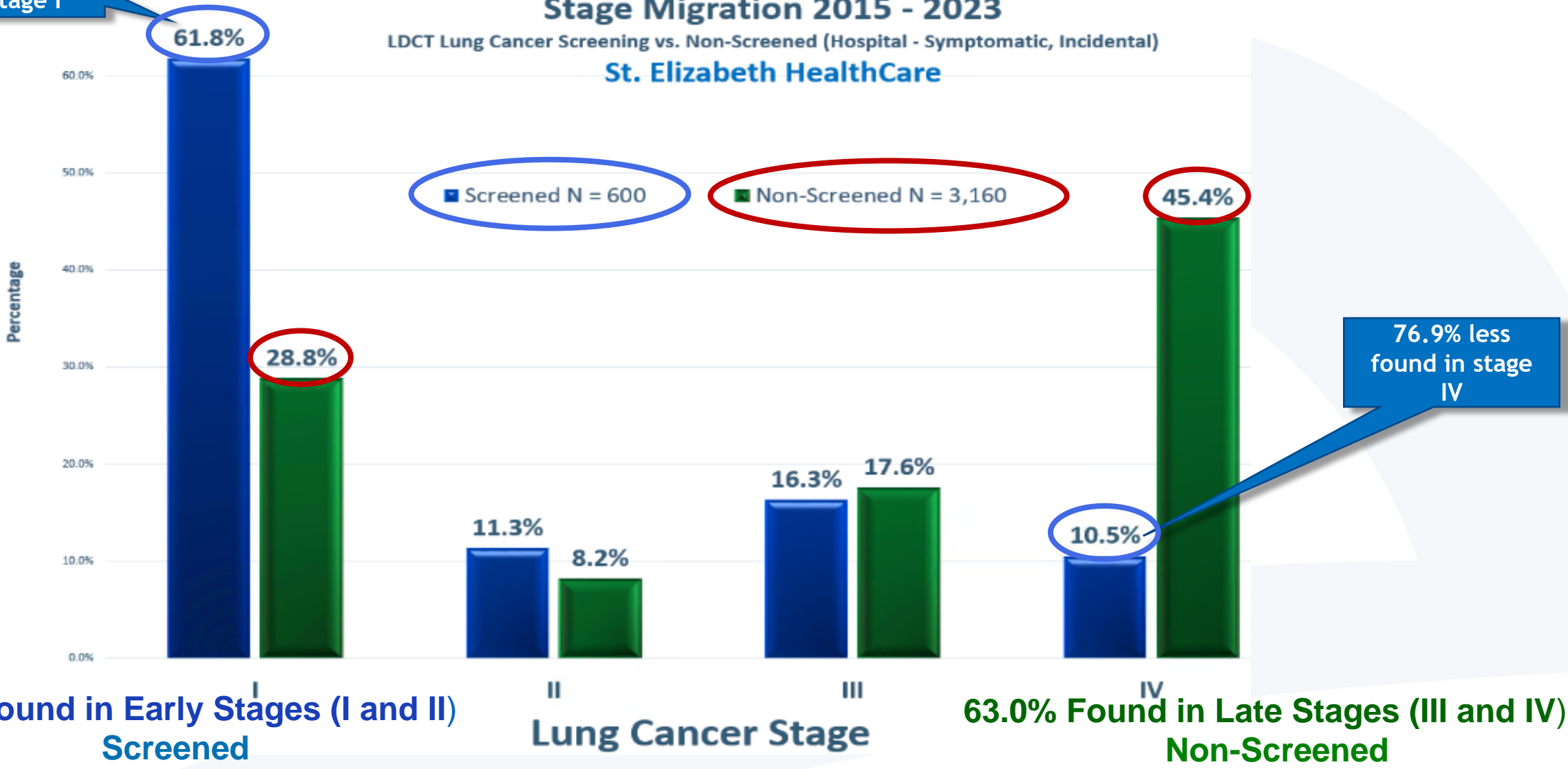
Average (Mean) PY =	61.0
Median PY =	52.0

2023 144 lung cancers discovered; 101 in stage I = 71.5% stage I, 80.6% in early stage I & II
2024 YTD 72.5% of lung cancers discovered in stage I

Stage Shift 2015 - 2023

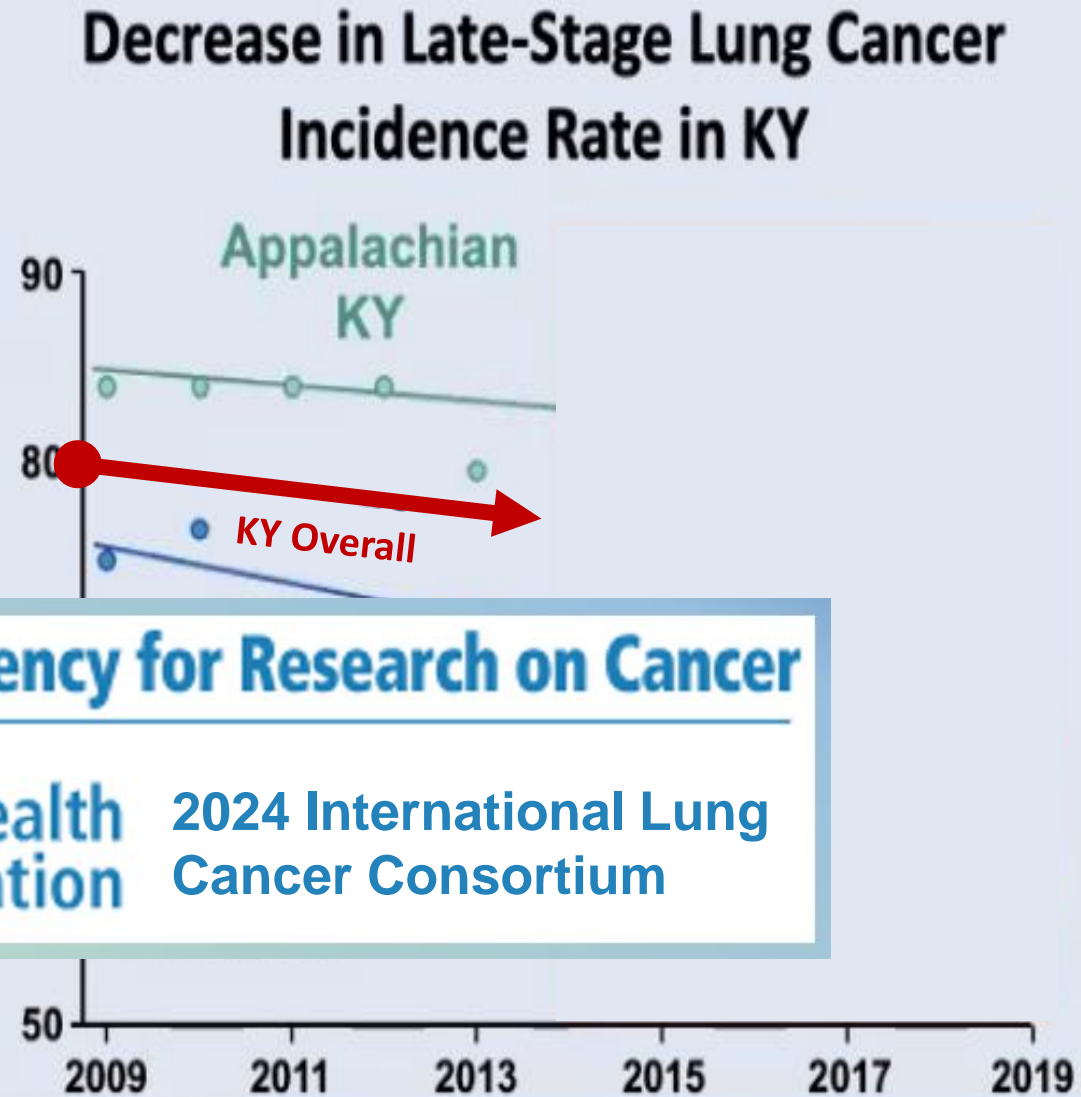
114.6% more LC found in stage I

Stage Migration 2015 - 2023
LDCT Lung Cancer Screening vs. Non-Screened (Hospital - Symptomatic, Incidental)
St. Elizabeth HealthCare



Decline in Late Stage Lung Cancer Diagnoses in Kentucky

- **Stable at ~80% from 2009 through 2014, without an appreciable decline for nearly 100 years**



- **Nearly 19% from 2014 to 2019!!**

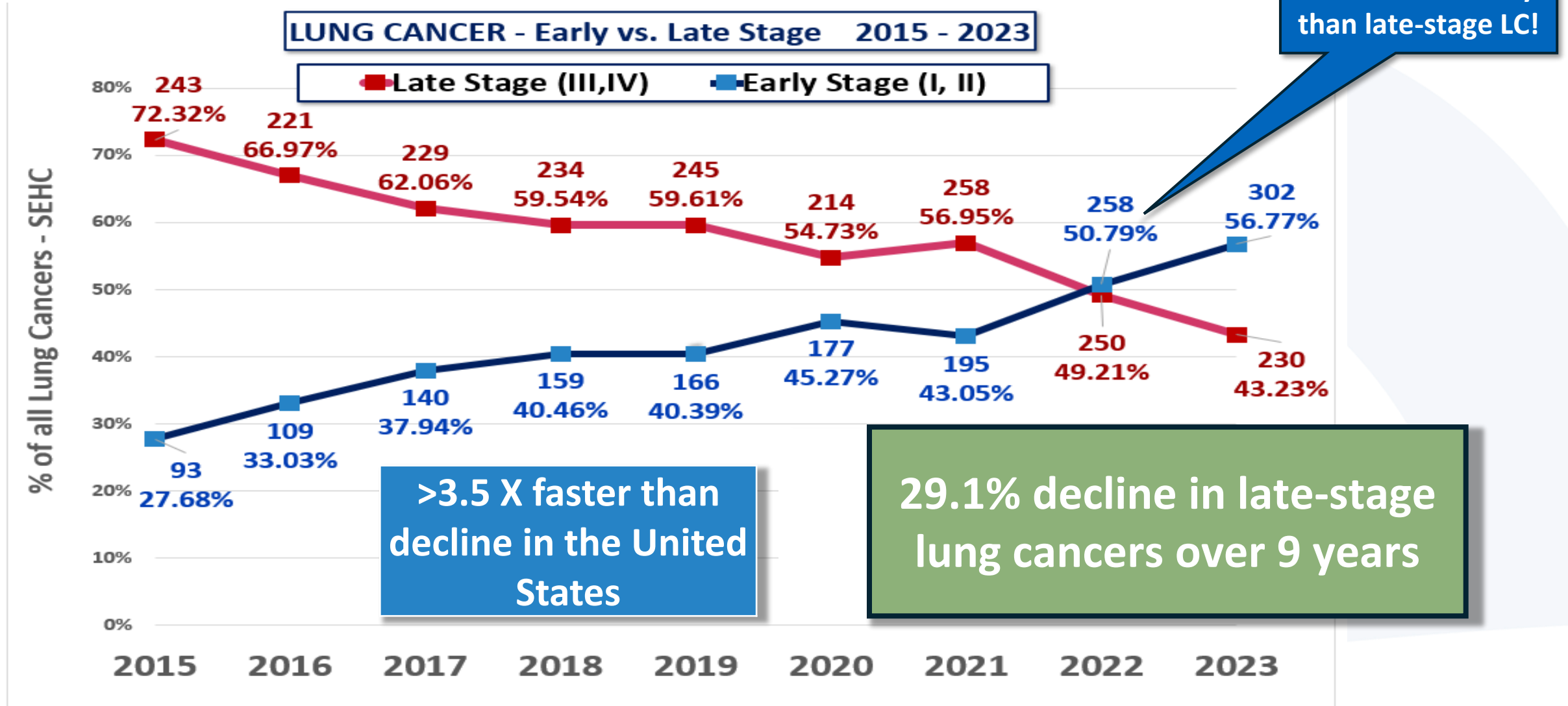
International Agency for Research on Cancer



World Health Organization 2024 International Lung Cancer Consortium

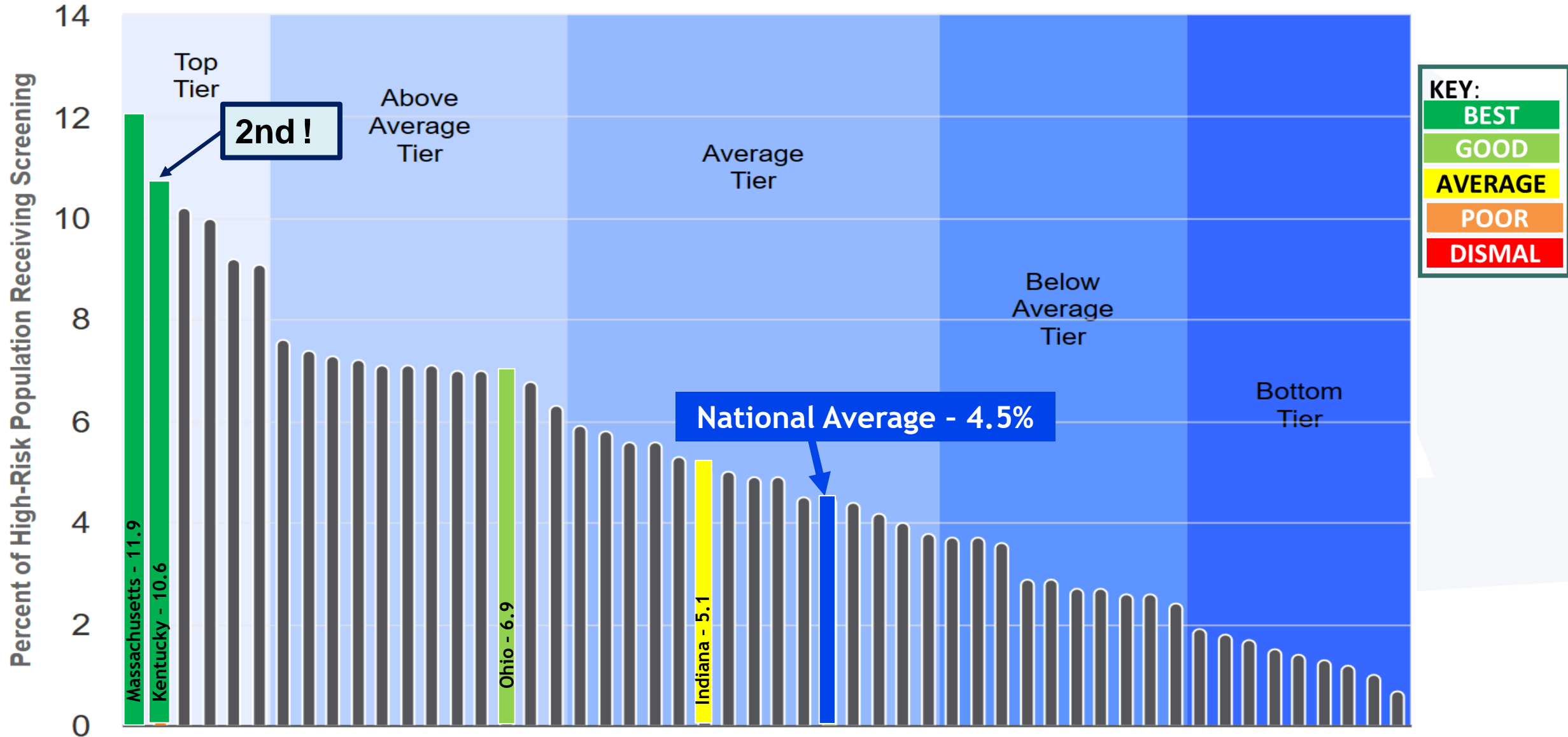
Decline in Late-Stage Lung Cancer

Lung Cancer – Early vs. Late Stage - 2015 – 2023 – A Decade of Evolution



NATIONAL SCREENING RATE

Nov. 14, 2023 Amer. Lung Assoc. State of Lung Cancer Report



HEDIS MEASURE LCS - DRAFT

Tobacco Use Screening and Intervention

1. Tobacco use screening

- a) % > 12 yo screened

2. Cessation Intervention

- a) % Tobacco users who received tobacco cessation intervention

Lung Cancer Data Readiness and Screening

3. Documented Smoking Information

- a) Adequate and complete to determine eligibility for LCS

4. Lung Cancer Screening – USPSTF 2021 criteria

- a) % eligible obtaining LDCT LCS or other qualifying CT chest

BUDGET LCSP ALLOCATIONS

1. Personnel/IT support/Supplies/Travel
2. Strategic Planning (Pathways)
3. Contract Program Evaluator - ECU
4. BRFSS Questionnaire (6 X \$5000/yr.)
5. KCP – East/West
6. Ky Cancer Link
7. UK Communications, Erin Hester, PhD
 - a) Social marketing project
 - b) Drafting op-ed for LCAM
8. Marketing
 - a) Educational Materials
 - b) Patient Testimonials
 - c) Website
9. MD Update magazine article(s)
10. QUILs/KyLEADS II
11. KCC Learning Collaborative
12. Exhibiting

THANK YOU!