2022 PREVENT CANCER DIALOGUE
INSIGHTS ON EXPANDING LUNG CANCER SCREENING
A KENTUCKY STORY

Michael Gieske, MD

June 9, 2022
Dearborn County Cancer Care Center
Opened to patients October 2020

140 Million Dollar Center
244,000 Square Feet
Largest Cancer Center within a 250 mile radius
ST. ELIZABETH PHYSICIANS

- Serving over 384,000 patients
- 701 Providers
  - 450 Physicians
  - 251 Advanced Practice Providers
- 2,100 Associates (including providers)
- 41 Specialties & Services
- 171 Practices / 56 Locations
- 3 States / 13 Counties
- One in two patients participating in value-based care programs
  - MSSP Track 1
  - CPC+ Track 2
  - 15 Value Based Contracts
- CBO 4 time recipient of HFMA MAP award
- 85% patients active users of patient portal
- 2020 recipient of AMGA Acclaim award

In 2021
- Nearly 1.9 million visits, 8% virtual visits
- Over $247 million in revenue
- Net growth of 2% physicians and providers

41 SPECIALTIES & SERVICES

Primary Care
- Family Medicine
- Internal Medicine
- Pediatrics
- Internal Medicine/Pediatrics
- Occupational Medicine/Business Health
- Urgent Care

Specialty Care
- Addiction Medicine
- Bariatric Surgery
- Behavioral Health
- Breast Surgery
- Cardiology
- Colon & Rectal Surgery
- Dermatology
- Electrophysiology
- Emergency General Surgery
- Endocrinology
- Gastroenterology
- General Surgery
- Geriatrics
- Hospital Medicine
- Infectious Disease
- Medical Oncology
- Medical Weight Management
- Neurology
- Obstetrics & Gynecology
- Ophthalmology
- Osteopathic Manipulation Medicine
- Pain Management/Spine
- Palliative Care
- Physical Medicine
- Plastic Surgery
- Podiatry
- Pulmonology
- Radiation Oncology
- Rheumatology
- Sleep Medicine
- Surgical Oncology
- Urology
- Vascular Surgery
- Wound Care

Number of SEP Providers

- 132
- 179
- 239
- 340
- 378
- 404
- 437
- 487
- 511
- 596
- 607
- 668
- 701
- 701
Cancer down nationwide, but ‘hot spots’ persist

Hotbed of Cancer Deaths in Ky, especially Eastern Ky.

By Michael Nedelman, CNN
Published 1:09 PM EST, Tue January 24, 2017

PHOTO: Courtesy of the Journal of the American Medical Association
LUNG CANCER
In 2021, the National Cancer Institute (NCI) estimated that the number of new cases is over 235,000, which is 55% higher than the national average!
KENTUCKY MORTALITY AND INCIDENCE BY COUNTY

Cancer Mortality (Age-Adj Rate)
Lung and Bronchus

Appalachian Region

Copyright 2022, University of Kentucky
2014 – 2018 Todd Burus

2021 Kentucky Cancer Needs Assessment
The Commonwealth of Kentucky has 120 counties that are broken into 15 different Area Development Districts (ADDs). ADDs consist of anywhere from 5 to 17 counties in a contiguous geographic region. The mission of the ADDs is to bring local civic and governmental leaders together to accomplish major objectives and take advantage of opportunities which cannot be achieved or realized by those governments acting alone.

The purpose of the below documents is to summarize relevant social determinants of health, behavioral risk factors and cancer mortality at the ADD level to facilitate coordination in the realm of cancer prevention and control planning. The Kentucky Cancer Program (KCP) — jointly administered by the University of Kentucky (KCP East) and University of Louisville (KCP West) — leads the way in control efforts for each ADD.

Copyright 2022, University of Kentucky
2014 - 2018
Estimated deaths, 2022 USA, American Cancer Society

By cancer type, both sexes combined

Next 3 Cancers Combined = 146,190

Lung and bronchus: 130,180
Colorectum: 52,580
Pancreas: 49,830
Breast: 43,780
Prostate: 34,500
Liver and intrahepatic bile duct: 30,520

Leukemia: 24,000
Non-Hodgkin lymphoma: 20,250
Brain and other nervous system: 18,280
Urinary bladder: 17,100
Esophagus: 16,410
Kidney and renal pelvis: 13,920
Ovary: 12,810
Myeloma: 12,640
Kentucky, American Cancer Society

**Estimated deaths, 2022**

Kentucky, by cancer type

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Estimated Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung and bronchus</td>
<td>2,730</td>
</tr>
<tr>
<td>Colorectum</td>
<td>880</td>
</tr>
<tr>
<td>Pancreas</td>
<td>740</td>
</tr>
<tr>
<td>Breast (female)</td>
<td>640</td>
</tr>
<tr>
<td>Leukemia</td>
<td>390</td>
</tr>
<tr>
<td>Liver and intrahepatic bile duct</td>
<td>390</td>
</tr>
</tbody>
</table>

- Next 4 Cancers Combined = 2,650;
- Colon, Breast, and Prostate Combined = 1,840

Non-Hodgkin lymphoma: 320
Prostate: 320
Brain and other nervous system: 290
Urinary bladder: 290
Esophagus: 270
Kidney and renal pelvis: 250
Myeloma: 190
Oral cavity and pharynx: 170
National Lung Cancer 5-Year Survival

Nov. 16, 2021 Amer. Lung Assoc. State of Lung Cancer Report
State Ranking by Survival Rate

National Average - 23.7

KEY:
- BEST
- GOOD
- AVERAGE
- POOR
- DISMAL
Smoking Prevalence in the United States

State Ranking by Smoking Rate

Nov. 16, 2021 Amer. Lung Assoc. State of Lung Cancer Report

National Average - 15.3

KEY:
- BEST
- GOOD
- AVERAGE
- POOR
- DISMAL

Utah - 7.9

Indiana - 19.2

Ohio - 20.4

Kentucky - 22.6

West Virginia - 23.8
LCS Criterion based on the NLST, National Lung Screening Trial, published in the NEJM in August 2011

• Screenings were performed on 53,454 individuals, meeting the high-risk criterion. Largest trial ever funded by NCI (National Cancer Institute)

• Data gathered across 33 Medical Centers in the USA

• Over a period of about 7 years, a 20% relative reduction in the rate of lung cancer deaths was demonstrated when compared to standard CXRs
  • 247 LC deaths/100,000 person-years – LDCT LCS vs.
  • 309 LC deaths/100,000 person-years – CXR Cohort
• 15,822 Participants in Belgium and the Netherlands, aged 50 – 74 yo, randomized
29,736 scans

• ≥15 cigarettes/day for 25 yr (18.75 PY), or
≥10 cigarettes/day for 30 yr (15 PY), and Quit < 10 yr ago
(younger age and lower smoking rate than NLST)

• Randomized: 12/23/2003 – 07/06/2006
## NLST AND NELSON – REDUCTION IN MORTALITY

<table>
<thead>
<tr>
<th>Percent Lung Cancer Mortality Decrease</th>
<th>F:M ratio</th>
<th>50/50 M/F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>8%</td>
<td>27%</td>
</tr>
<tr>
<td>NLST</td>
<td></td>
<td>41/59</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NELSON</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26%</td>
<td></td>
<td>39 - 61%</td>
</tr>
<tr>
<td>39 - 61%</td>
<td></td>
<td>16/84</td>
</tr>
</tbody>
</table>
Overall, the entire process takes about 15 minutes or so; the scan itself takes less than 3 minutes.

LDCT uses X-rays to scan the entire chest in about 5 to 10 seconds during a single breath-hold. Less than background dose of radiation for 1 yr, 1.3 mSv.

The process is performed without needles or contrast/dye.
Commercial Insurance payers have 1 year after the USPSTF guidelines are finalized to cover A and B recommendations under the PPACA; year begins after date of insurance contract renewal.

### Recommendation Summary

<table>
<thead>
<tr>
<th>Population</th>
<th>Recommendation</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years</td>
<td>The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.</td>
<td>B</td>
</tr>
</tbody>
</table>
AAFP Updates Recommendation on Lung Cancer Screening
April 6, 2021, 8:44 a.m. News Staff — Less than a month after the U.S. Preventive Services Task Force issued a final recommendation statement on screening for lung cancer with low-dose CT, the Academy has published an updated recommendation on the topic.

Lung Cancer Screening, Adult
Grade: B recommendation
The AAFP supports the United States Preventive Services Task Force (USPSTF) recommendation for annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.

The AAFP has reviewed the evidence and has determined there is sufficient evidence to support a B recommendation for lung cancer screening in adults at increased risk. However, the AAFP acknowledges that the harms from annual screening with LDCT are not well documented at this time and that there are considerable barriers to screening for lung cancer in the community setting. Future research is needed to determine the harms of annual screening with LDCT including overdiagnosis, unnecessary procedures due to incidental findings, and barriers to care among communities of color. (2021)
### 5 Year Survival Rates – 2018 American Cancer Society

#### Non Small Cell Lung Cancer (NSCLC)

<table>
<thead>
<tr>
<th>Stage</th>
<th>5 Year Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>92%</td>
</tr>
<tr>
<td>IA2</td>
<td>83%</td>
</tr>
<tr>
<td>IA3</td>
<td>77%</td>
</tr>
<tr>
<td>IB</td>
<td>68%</td>
</tr>
<tr>
<td>IIA</td>
<td>60%</td>
</tr>
<tr>
<td>IIB</td>
<td>53%</td>
</tr>
<tr>
<td>IIIA</td>
<td>36%</td>
</tr>
<tr>
<td>IIIB</td>
<td>26%</td>
</tr>
<tr>
<td>IIIC</td>
<td>13%</td>
</tr>
<tr>
<td>IVA</td>
<td>10%</td>
</tr>
<tr>
<td>IVB</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

#### Stage Matters!

The numbers below come from thousands of people from all over the world who were diagnosed with NSCLC between 1999 and 2010. Although the numbers are based on people diagnosed several years ago, they are the most recent rates published for the current AJCC (Am Joint Comm. Ca) staging system. *Chest, January 2017, Vol. 151, Issue 1, Pages 193-203*

#### Small Cell Lung Cancer (SCLC)

<table>
<thead>
<tr>
<th>Stage</th>
<th>5 Year Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>31%</td>
</tr>
<tr>
<td>II</td>
<td>19%</td>
</tr>
<tr>
<td>III</td>
<td>8%</td>
</tr>
<tr>
<td>IV</td>
<td>2%</td>
</tr>
</tbody>
</table>

The numbers below are relative survival rates calculated from the National Cancer Institute’s SEER database, based on people who were diagnosed with SCLC between 1988 and 2001. These survival rates are based on the TNM staging system in use at the time, which has since been modified slightly for the latest version. Because of this, the survival numbers may be slightly different for the latest staging system.
A total 1.9% of more than 7.6 million current and former heavy smokers in the United States underwent lung cancer screening in 2016.

2018 ASCO (Amer Soc Clin Oncol) Annual Meeting

In 2015, among those who met USPSTF criteria, 4.4% (95% CI=3.0%, 6.6%) Jan. 2019

American Journal of Preventive Medicine

A total 5.7% in the United States underwent lung cancer screening in 2019, ranging from 1.0% in NV to 18.5% MA

Nov. 17, 2020 Amer. Lung Assoc. State of Lung Cancer Report

A total 6.5% of 8,510,000 in the United States underwent lung cancer screening in 2020, ranging from 1.1% in CA to 19.7% MA (USPSTF 2013)


Up 3.2% in 10 years 😞 !
Kentucky Derby
PUTTING SOME PIECES TOGETHER

Lowering the barriers!
Tools of the trade
EMR – Health Maintenance Prompt

- Low Dose Lung Cancer Screening
  - Satisfied

- COVID-19 Vaccine (1)
  - Overdue - never done

- DTaP/Td (2 - Td or Tdap)
  - Overdue since 9/2/1996

- Colorectal Cancer Screening: Colonoscopy
  - Overdue since 4/1/2014

- Zoster (2 of 3)
  - Overdue since 4/1/2019

- Low Dose Lung Cancer Screening
  - Overdue since 12/20/2020

- Annual Wellness Exam
  - Overdue since 12/20/2021

- Fall Risk Assessment
  - Overdue since 12/20/2020

- AAA Screening
  - Overdue since 12/20/2020

- Influenza Vaccine (1)
  - Overdue since 9/1/2021
LDCT LCS BPA – Best Practice Alert/Advisory
Our LCS EMR SmartSet

Low Dose Lung Cancer Screening

- From BestPractice
  - Your patient has not had CT low dose lung cancer screening this year. Please address whether a screening order should be done at today's office visit.

- Diagnosis
  - CT LUNG CANCER SCREENING LOW DOSE (5)
    - Expires: 8/31/2022, Routine, Ancillary Performed

- Testing

- Documentation
  - AMB LUNG CANCER SCREENING SHARED DECISION MAKING NOTE

- Education
  - Lung Cancer Screening Education

- Charges
  - Additional Code
    - PR VISIT TO DETERMINE LDCT ELIG
      - Clinic Performed, Qty-1

Diagnosis

- Encounter for screening for lung cancer [Z12.2]
- Cigarette smoker [F17.210]
- Cigarette nicotine dependence in remission [F17.211]
- Cigarette nicotine dependence with withdrawal [F17.213]
- Nicotine dependence, cigarettes, with other nicotine-induced disorders [F17.218]
- Cigarette nicotine dependence with nicotine-induced disorder [F17.219]
- Personal history of tobacco use, presenting hazards to health [Z87.891]
- Nicotine dependence [F17.200]

G0296

0.52 wRVU
Our LCS EMR SmartSet, Baseline vs. Annual

Lung cancer screening shared decision making order question behavior/defaults

If Baseline is chosen, the SDM questions will populate with default "yes" answers.

CT LUNG CANCER SCREENING LOW DOSE

Status: Normal Standing Future
Expected Date: Today Tomorrow 1 Week 2 Weeks 1 Month 3 Months 6 Months
Expires: 7/15/2022 1 Month 2 Months 3 Months 4 Months 6 Months 1 Year

Priority: Routine STAT
Class: Ancillary Pe

This test is intended as a screening exam only and patients must be Asymptomatic. Symptoms such as Hemoptysis, unexplained wt. loss, chest pain, or existing malignancy are inappropriate for this test please consider other diagnostic testing. I have discussed with the patient the benefits and harms of the Screening CT, including the follow-up testing, false positive result radiation exposure.

I have counseled the patient of the importance on adhering to the annual screening and their ability or willingness to undergo diagnosis and treatment. I have counseled the patient on the importance of smoking cessation, provided smoking cessation information, and discussed the importance of continued smoking abstinence.

Reason for exam: Lung Screening

If you would like to receive in basket notification if this order has not been resulted within 14 days of the specified Expected Date.

If Annual is chosen, the SDM questions will populate with no defaults, and recommended yield signs.

Annual

Baseline
### Other qualifying Chest CT Codes

<table>
<thead>
<tr>
<th>CT Img Codes Meeting CT criterion for Lung Cancer Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMG Code</strong></td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>IMG10853</td>
</tr>
<tr>
<td>IMG10944</td>
</tr>
<tr>
<td>IMG11369</td>
</tr>
<tr>
<td>IMG10913</td>
</tr>
<tr>
<td>IMG11290</td>
</tr>
<tr>
<td><strong>IMG Code</strong></td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>IMG200</td>
</tr>
<tr>
<td>IMG202</td>
</tr>
<tr>
<td>IMG203</td>
</tr>
<tr>
<td>IMG206</td>
</tr>
<tr>
<td>IMG789</td>
</tr>
<tr>
<td>IMG790</td>
</tr>
<tr>
<td>IMG1428</td>
</tr>
<tr>
<td>IMG1664</td>
</tr>
<tr>
<td>IMG10370</td>
</tr>
<tr>
<td>IMG10371</td>
</tr>
<tr>
<td>IMG10372</td>
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<td>IMG10373</td>
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<tr>
<td>IMG10374</td>
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<td>IMG10375</td>
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<td>IMG10376</td>
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<tr>
<td>IMG10377</td>
</tr>
<tr>
<td>IMG10378</td>
</tr>
<tr>
<td>IMG10379</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>IMG Code</strong></th>
<th><strong>CT Chest Abdomen with and without contrast</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>IMG10380</td>
<td>CT Chest Abdomen with and without contrast</td>
</tr>
<tr>
<td>IMG10381</td>
<td>CT Chest Abdomen without contrast</td>
</tr>
<tr>
<td>IMG10382</td>
<td>CT Neck Chest with contrast</td>
</tr>
<tr>
<td>IMG10383</td>
<td>CT Neck Chest with and without contrast</td>
</tr>
<tr>
<td>IMG10384</td>
<td>CT Neck Chest without contrast</td>
</tr>
<tr>
<td>IMG10396</td>
<td>HR (high resolution) CT of Chest without contrast</td>
</tr>
<tr>
<td>IMG10397</td>
<td>HR (high resolution) CT of Chest with contrast</td>
</tr>
<tr>
<td>IMG10538</td>
<td>CT Neck Chest Abdomen Pelvis without contrast</td>
</tr>
<tr>
<td>IMG10539</td>
<td>CT Neck Chest Abdomen Pelvis with and without contrast</td>
</tr>
<tr>
<td>IMG10540</td>
<td>CT Neck Chest Abdomen Pelvis with contrast</td>
</tr>
<tr>
<td>IMG10628</td>
<td>CT Angiogram Chest, Abd Pelvis with contrast</td>
</tr>
<tr>
<td>IMG10629</td>
<td>CT Angiogram Chest, Abd with contrast</td>
</tr>
<tr>
<td>IMG10855</td>
<td>CT Chest - Superdimensional with contrast</td>
</tr>
<tr>
<td>IMG10856</td>
<td>CT Chest - Superdimensional without contrast</td>
</tr>
<tr>
<td>IMG10914</td>
<td>CT Chest with Diag Lung F/U</td>
</tr>
<tr>
<td>IMG11078</td>
<td>CT Neck Chest Abdomen with and without contrast</td>
</tr>
<tr>
<td>IMG11079</td>
<td>CT Neck Chest Abdomen without contrast</td>
</tr>
<tr>
<td>IMG11080</td>
<td>CT Neck Chest Abdomen with contrast</td>
</tr>
<tr>
<td>IMG11081</td>
<td>IR CT Angiogram of Chest with contrast</td>
</tr>
<tr>
<td>IMG11218</td>
<td>CT Chest SN bronchoscopy</td>
</tr>
<tr>
<td>IMG11364</td>
<td>CT Trauma Chest Abdomen Pelvis with contrast</td>
</tr>
<tr>
<td>IMG11366</td>
<td>CT Chest, Abd, Pelvis with oral, without IV contrast</td>
</tr>
<tr>
<td>IMG11386</td>
<td>CT Angiogram Aorta/Chest with contrast</td>
</tr>
</tbody>
</table>
Current smoker = currently smokes any amount even occasionally  
Former smoker = if they have quit smoking (does not include those in the process of quitting)

Start Date: should be patient’s very first start date, not a re-start date

Most current quit date if patient has quit. This will reset the 15 year rule for screenings.

Packs/day: This will be the average of how many packs per day when the patient smoked full time. (“I smoked between 1 & 2 packs a day when I smoked all the time” = 1.5)

Type: Needs to be marked cigarettes to qualify for lung cancer screening

Years: Use the calculator to calculate if patient gives you a start date
ie: 2018 – 1966 = 52

If a patient starts smoking again:
- Remove quit date from box
- Do not update start date

Ready to Quit: Yes No
Counseling Given: Yes No
Comments:

To be used for: patients who are weaning down (ie: “pt down to 8 cigarettes a day), using electronic cigarettes, etc. Do not include dates for starting and stopping.
Low Dose CT Lung Cancer Screening Program

Available Locations
Testing is available at any of our eight American College of Radiology (ACR) or GOs Care Continuum Center of Excellence (GOs CCCOE) accredited convenient locations:
- Covington
- Dearborn
- Edgewood
- Florence
- Ft. Thomas
- Grant County
- Hebron
- Owen County

Once you have an order, please call Central Scheduling (859) 655-2600.

Low Dose Screening Chest CT

Lung cancer is the leading cause of cancer death in the United States. St. Elizabeth has initiated a Lung Cancer Screening Program in an effort to catch early, non-symptomatic disease, in patients who are considered high risk. The patients at risk have been defined by criteria based on the 2011 landmark National Lung Screening Trial, and more recently by the 2021 USPSTF (United States Preventive Services Task Force) screening criteria. The benefit of screening is catching lung cancer in its earliest stages when it is most treatable, thereby reducing lung cancer death and maximizing cure. There is a potential for harm from unnecessary radiation exposure or procedures when patients who are not at risk are screened. Early diagnosis is the key to long term survival. Low Dose Screening Chest CT’s have shown a 20 - 60% reduction in death from lung cancer.

What about the radiation dose for LDCT?
The radiation dose for the lung cancer screening is set extremely low. It is roughly less than one third of the yearly natural occurring background radiation on the earth.

What are the qualification criteria?
- Age 50 to 80.
- Have an equivalent of 20 pack year smoking history.
- Currently smoking or person that formerly smoked who has quit within the last 15 years.

To determine if you are a candidate for a lung screening CT scan, schedule an appointment with your primary care physician to discuss your options and ask about our Retail Lung Cancer Screening program.

Freedom from Smoking
Freedom from Smoking is a FREE 7-week tobacco cessation program developed by the American Lung Association and offered to you by St. Elizabeth Healthcare. The program is designed to help you, the nicotine-dependent adult, develop a plan of action that leads to your quit day. The program gives you options, resources and support to quit for good as well as the support you need to remain smoke free for life.

For more information or to register for the next session, please call (859) 304-4073.

How much does the Screening Chest CT cost?
The test is now largely covered by the Center for Medicare & Medicaid Services (CMS) as well as most insurance carriers with no out of pocket cost.

How do I get a Screening?
If you feel that you meet all of the qualification criteria, please talk to your physician or call our Lung Screening Nurse Navigator at (859) 307-4073.

Once you have an order, please call Central Scheduling (859) 655-4000.

What is involved in the test?
No IVs, needles or dye are required for this test. You will lie on your back on the table with your arms resting above your head. The table will slide in and out of the circular camera two to three times and you will be asked to hold your breath for less than 10 seconds each time. The entire test takes less than three minutes.
SEHC – The NRB Algorithm

1. CT Surveillance 1, 3, 6, 12 mo. Follow-up
2. Thoracic Surgery Referral
3. Pulmonary Referral
4. Medical Oncology Referral
5. Pulmonary or Medical Oncology Work-Up Ongoing (Already Seeing)
6. Thoracic Multi-Disciplinary Clinic Referral

- CT Surveillance
- Resolved or Stable As Specified
- Re-Enter Lung Cancer Screening Program As Appropriate
- Interventional Radiology/Biopsy
  - CT Surveillance
  - Resection
  - Radiation Oncology
  - Medical Oncology
  - IR Ablation
  - Pulmonary Referral

- Endobronchial Ultrasound (EBUS)
- Transbronchial Needle Aspiration (TBNA)
- Electromagnetic Navigation Bronchoscopy (ENB)
- Bronchoscopy

- Surgical Candidate?
- Treatment

- Incidental Nodule or Finding "Code Lung Management"
- Medical Oncology Navigation Team
  - Radiology
  - Primary Care
  - Pulmonology
- Thoracic Surgery

- Lung Nodule Review Board
- Nurse Navigator

- Abnormal Nodule/Progression
- Lung Cancer Screening CAT4
### Tracking Our Progress – SEP Attributed Patients – 2021

**The “Hawthorne Effect”**

National Average 6.5% of 8.5 million eligible population


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<table>
<thead>
<tr>
<th>Rank</th>
<th>PCP</th>
<th>Measure</th>
<th>Measure Date</th>
<th>Benchmark</th>
<th>Numerator</th>
<th>Denominator</th>
<th>% Gap</th>
<th>Gap/PCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>09/30/2021</td>
<td>&gt; 46.00%</td>
<td>6,184</td>
<td>12,461</td>
<td>49.63%</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>34</td>
<td>7</td>
<td>71.43%</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>45</td>
<td>64</td>
<td>70.31%</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>53</td>
<td>76</td>
<td>69.74%</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>81</td>
<td>118</td>
<td>68.64%</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>44</td>
<td>65</td>
<td>67.69%</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>37</td>
<td>55</td>
<td>67.27%</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>46</td>
<td>69</td>
<td>66.67%</td>
<td>14</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>6</td>
<td>6</td>
<td>66.67%</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>6</td>
<td>9</td>
<td>66.67%</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>17</td>
<td>26</td>
<td>65.38%</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>60</td>
<td>92</td>
<td>65.22%</td>
<td>18</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>38</td>
<td>59</td>
<td>64.45%</td>
<td>11</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>47</td>
<td>73</td>
<td>63.48%</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>33</td>
<td>44</td>
<td>68.18%</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>57</td>
<td>89</td>
<td>58.52%</td>
<td>17</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>47</td>
<td>87</td>
<td>56.62%</td>
<td>13</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>35</td>
<td>77</td>
<td>62.27%</td>
<td>13</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>73</td>
<td>118</td>
<td>61.86%</td>
<td>19</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>16</td>
<td>26</td>
<td>61.54%</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>48</td>
<td>77</td>
<td>61.54%</td>
<td>12</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Screening: Lung Cancer</td>
<td>12/31/2021</td>
<td>&gt; 46.00%</td>
<td>35</td>
<td>57</td>
<td>61.40%</td>
<td>9</td>
</tr>
</tbody>
</table>

### CDC HIGH ASPIRATIONS VS. SEHC CANCER SCREENING

#### St Elizabeth Health Care Cancer Screening Rates 2018 - 2021

<table>
<thead>
<tr>
<th>YEAR</th>
<th>%</th>
<th>Lung</th>
<th>Breast</th>
<th>Colon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>NA</td>
<td>68</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>36.0</td>
<td>77.6</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>29.3</td>
<td>72.4</td>
<td>74.2</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>49.7</td>
<td>67.4</td>
<td>73.7</td>
<td></td>
</tr>
<tr>
<td>National$^{1,2,3}$</td>
<td>6.51</td>
<td>66.7</td>
<td>68.8</td>
<td></td>
</tr>
</tbody>
</table>

2. CDC Health, United States, 2019, table 33 pdf icon [PDF – 9.8 MB]
3. CDC Colorectal Cancer Statistics | CDC

---

**CDC Healthy People Target 2030 – 7.5%!**

*HP 2030 Target C: 7.5% Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey. Includes adults who have smoked for 30+ pack-years and who currently smoke or have quit within the past 15 years. Excludes adults who reported a history of lung cancer. Data are age-adjusted to the 2000 US standard population using age groups: 55-64, 65-80. Trend lines connect sequential data points. Statistical significance of difference between sequential points was determined using a two-sample test incorporating the standard errors of the estimates. The AAPP is the Average Annual Percent Change and is a weighted average of the APCs. NSC: Non-Significant Change.*

**2021 Yearend 49.7%**
DETERMINING ROI – LUNG CANCER SCREENING

- 2019 ROI LCS SEHC $280.13 net revenue/scan (April 2019)
- (CRCS [colonoscopy] - $257.39; BCS - $125.84)
- **2021 6,084 LCSs $1,676,640 at $280.13/screen = $1,704,311 net revenue**
- G02, Eon, Advisory Board also have Revenue Calculators
- THREE WAYS LCS Benefits System and Drives Value
  1. **Direct Revenue** from scans, reimbursement; marginal return
  2. **Downstream Revenue**; a significant contribution
  3. **Cost Savings** (Reduction TCC, aka improved health!); highly impactful – more difficult to measure, but major driver in value-based market
Takes 200 qualifying patients to move uptake by 1% for attributed patients
## St. Elizabeth LDCT Screening Volumes (2015 – 2022)

### TRACKING OUR PROGRESS – THE PATH TO SUCCESS

### Year | Total LDCT Screening
--- | ---
2013 | 7
2014 | 121
2015 | 252
2016 | 753
2017 | 1,965
2018 | 3,585
2019 | 4,082
2020* | 3,843
2021 | 6,084
2022 YTD** | 2,429

*Methodology to include incident and interval screens starting 2022

*5.81% pandemic reduction 2020 vs. 2019*
...AND SOME GREAT RESULTS TO SHARE!

LCS really does make a difference!
## Registry Summary

### Analysis of Positive Scans - St. Elizabeth Healthcare --- 1/1/2015 - 2022 YTD

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>TOTAL</th>
<th>% Scans</th>
<th>False Positive</th>
<th>False Discovery</th>
<th># Scans to find 1 LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total LDCT LC Scr. SCANS</td>
<td>252</td>
<td>753</td>
<td>1965</td>
<td>3585</td>
<td>4082</td>
<td>3843</td>
<td>6084</td>
<td>2261</td>
<td>22825</td>
<td>*</td>
<td>**</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Annual</td>
<td>1815</td>
<td>2511</td>
<td>4120</td>
<td>1528</td>
<td>9974</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>2267</td>
<td>1332</td>
<td>1964</td>
<td>733</td>
<td>6296</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual LCS - % of total</td>
<td>44.5%</td>
<td>65.3%</td>
<td>67.7%</td>
<td>67.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-Up/Interval Screens</td>
<td>9</td>
<td>32</td>
<td>100</td>
<td>168</td>
<td>293</td>
<td>286</td>
<td>430</td>
<td>155</td>
<td>1473</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 1</td>
<td>127</td>
<td>457</td>
<td>1164</td>
<td>2194</td>
<td>2312</td>
<td>2284</td>
<td>3630</td>
<td>1321</td>
<td>13489</td>
<td>59.10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 2</td>
<td>76</td>
<td>201</td>
<td>506</td>
<td>887</td>
<td>1250</td>
<td>1118</td>
<td>1760</td>
<td>673</td>
<td>6471</td>
<td>28.35%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 3 (Indeterminate)</td>
<td>22</td>
<td>47</td>
<td>143</td>
<td>240</td>
<td>250</td>
<td>256</td>
<td>401</td>
<td>149</td>
<td>1508</td>
<td>6.61%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 4 (Suspicious) - Total</td>
<td>27</td>
<td>48</td>
<td>152</td>
<td>264</td>
<td>270</td>
<td>185</td>
<td>293</td>
<td>116</td>
<td>1355</td>
<td>5.94%</td>
<td>4.31%</td>
<td>72.62%</td>
<td></td>
</tr>
<tr>
<td>Cat 4A</td>
<td>16</td>
<td>33</td>
<td>108</td>
<td>186</td>
<td>188</td>
<td>134</td>
<td>230</td>
<td>90</td>
<td>985</td>
<td>4.32%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 4B</td>
<td>11</td>
<td>15</td>
<td>44</td>
<td>78</td>
<td>82</td>
<td>45</td>
<td>58</td>
<td>25</td>
<td>358</td>
<td>1.57%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 4X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.05%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat 3 + Cat 4 - Combined</td>
<td>49</td>
<td>95</td>
<td>295</td>
<td>504</td>
<td>520</td>
<td>441</td>
<td>694</td>
<td>265</td>
<td>2863</td>
<td>12.54%</td>
<td>10.92%</td>
<td>87.04%</td>
<td></td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>5</td>
<td>16</td>
<td>37</td>
<td>82</td>
<td>81</td>
<td>50</td>
<td>64</td>
<td>36</td>
<td>371</td>
<td>1.63%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#LC/Per Tot LDCT = 61.5
## LUNG CANCER COMPREHENDIUM 2015 – 2022 (DEIDENTIFIED)

### Table: Lung Cancer Diagnosis and Treatment

<table>
<thead>
<tr>
<th>Year</th>
<th>Patient</th>
<th>Sex</th>
<th>MIN</th>
<th>DOB</th>
<th>Py</th>
<th>Disease Status</th>
<th>Date of Diagnosis</th>
<th>Date of Death</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>Smith, John</td>
<td>M</td>
<td>000001</td>
<td>3/16/1984</td>
<td>47</td>
<td>9</td>
<td>1</td>
<td>1/8/2021</td>
<td>4/8/2021</td>
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<td>Smith, Mary</td>
<td>F</td>
<td>000002</td>
<td>2/1/1981</td>
<td>40</td>
<td>3</td>
<td>1</td>
<td>1/11/2021</td>
<td>4/14/2021</td>
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<tr>
<td>2021</td>
<td>Jones, George</td>
<td>M</td>
<td>000003</td>
<td>3/9/1981</td>
<td>40</td>
<td>3</td>
<td>1</td>
<td>7/10/2021</td>
<td>7/20/2021</td>
</tr>
</tbody>
</table>

**Notes:**
- **SBRT/WOB/TOD/WOD/WOD:** Surgery/WOB/TOD/WOD
- **Treatment Initiation Date:** Date of first clinically detectable tumor
- **Sus. Scan to Intervent. Days:** Time to first intervention
- **Response:** Complications, adverse events
- **Miscellaneous:** Date of first LCC, Age at first LCC, Age at Sus. Scan, Smoking Status at 1st LCC, Smoking Status at Sus. Scan, Date of Quit, Days, Quit, Quit Date, Quit Date

>40 metrics tracked for every cancer found.
## Performance of LCSP, Histology - SEHC

### Overall Lung Cancer Discovery

<table>
<thead>
<tr>
<th>Stage - all yrs</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>208</td>
<td>55.61%</td>
</tr>
<tr>
<td>Stage II</td>
<td>48</td>
<td>12.83%</td>
</tr>
<tr>
<td>Stage III</td>
<td>68</td>
<td>18.18%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>50</td>
<td>13.37%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>374</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Stage I & II:** 68.4% found in early stages

**Average (Mean) PY:** 59.9

**Median PY:** 51.0

### Lung Cancer Type

<table>
<thead>
<tr>
<th>Type</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>adenocarc.</td>
<td>159</td>
<td>43.3%</td>
</tr>
<tr>
<td>squamous</td>
<td>112</td>
<td>30.5%</td>
</tr>
<tr>
<td>small cell</td>
<td>44</td>
<td>12.0%</td>
</tr>
<tr>
<td>limited</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>extensive</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>large cell</td>
<td>7</td>
<td>1.9%</td>
</tr>
<tr>
<td>carcinoid</td>
<td>4</td>
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</tr>
<tr>
<td>other</td>
<td>6</td>
<td>1.6%</td>
</tr>
<tr>
<td>unknown</td>
<td>35</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

**Total:** 367 (100%)
STAGE MIGRATION 2015 – 2021 MID-YEAR
LUNG CANCERS DISCOVERED – 2,458 OVER 6 1/2 YEARS

Stage Migration 2015 - 2021 2Q (midyear)
LDCT Lung Cancer Screening vs. Non-Screened (Hospital - Symptomatic, Incidental)
St. Elizabeth HealthCare

Total of 2,458 Lung Cancers - SEHC
- Screened N = 301
- Non-Screened N = 2157

68.8% Found in Early Stages (I and II) Screened
66.1% Found in Late Stages (III and IV) Non-Screened

120.7% more LC found in stage I
72.2% less found in stage IV
NATIONAL SCREENING RATE

Nov. 16, 2021 Amer. Lung Assoc. State of Lung Cancer Report

State Ranking by High-Risk Screening Rate

Down 0.7%

Moved from 4th to 2nd position, up 2.9%

National Average - 5.7%
STATE-BASED INITIATIVES, POLICY, COMMUNITY ADVOCACY, PATIENT SUPPORT

Move the dial, engage, empower patients!
STATE-BASED INITIATIVES

The Kentucky Cancer Consortium Lung Cancer Network and Kentucky LEADS Collaborative celebrate success in lung cancer screening in Kentucky

1. 2013
   - Data review of the lung cancer burden, momentum from colon cancer screening success, approval of National Lung Cancer Screening Guidelines, passion from Kentucky leaders in lung cancer - Development of the Kentucky Cancer Consortium Lung Cancer Network.

2. 2013
   - Added lung cancer screening (through reduction in late-stage diagnosis) to Kentucky Cancer Action Plan.

3. 2013
   - Bristol Myers Squibb Foundation Awarded the KY LEADS Collaborative - provider education, survivorship, and quality implementation of lung cancer screening.

4. 2015
   - KCC Lung Cancer Network designated as the Community Advisory Board for the KY LEADS Collaborative quality.

5. 2015
   - State-Based Initiative - 10 healthcare systems, over 60 hospitals, over 60% care in state

6. 2016
   - Formed 2016
   - Goal to promote means and methods to improve the health of our state

Chose Lung Cancer and Screening Promotion as the first quality improvement project
   - September 2019

- Addressing best practices, adherence, provider and community outreach, healthcare disparities
- Working on statewide deidentified and coordinated data sharing, benchmarking, and quality improvement initiatives - >100 metrics
Kentucky House Bill 219

- State-supported to fund LCS Program and LCS Advisory Committee
- Appropriations of $1,000,000 over 2 years

Department of Defense CDMRP

- LungCAN – grassroots coalition of LC Advocacy Groups
- Increase DoD Congressionally Directed Medical Research Program funding.
- 20 to 60 million dollars (breast cancer receives 150 million

**THANK YOU Cancer Prevention Foundation! 80+ organization endorsements**
Patient Advocacy and Policy

Kentucky – the Faces of Lung Cancer – Survivors, Advocates

Dear Member of Congress,

As a group of lung cancer patients, caregivers, doctors and researchers, we urge you to support $800 million for the Lung Cancer Research Program within the Congressional Directed Medical Research Program (CDMRP) in the Fiscal Year 2022 Defense Appropriations Bill.

We were deeply frustrated to learn that in FY21, because of a lack of funding, the Lung Cancer Research Program was forced to reject 80 out of 139 research proposals rated excellent or outstanding by reviewers (79%). This represents 81 missed opportunities to advance novel, desperately needed technologies and treatments to fight America’s top cancer killer. A $800 million appropriation could have funded all of these high-quality proposals. We ask you to support lung cancer patients by making this critical funding commitment now.

The past two decades of medical research have brought new hope to the approximately 250,000 Americans diagnosed with lung cancer each year. Diagnostic, surgical and therapeutic innovations have increased the five-year lung cancer survival rate by 1% to 35% over the past five years. However, 25% lags significantly behind almost every other major cancer. Without a cure, lung cancer patients, most of whom are diagnosed at advanced stages, confront the terrible reality that their current cancer therapies will inevitably fail. Lung cancer patients' survival depends on significantly more research into everything from early detection to treatments that combat resistance to existing therapies.

Despite many scientific advances, lung cancer remains the country’s leading cause of cancer deaths among women (21%) and men (27%). Each day, more than 150 people die of lung cancer, which is more than those who die of breast, prostate and pancreatic cancers combined. It is 2 times more than those who die of colorectal cancer, the second leading cause of cancer death.

Veterans are at significantly greater risk for lung cancer and are diagnosed at higher rates than the general population. The Veterans Health Administration (VHA) estimates that 800,000 veterans are at risk for lung cancer due to air significantly higher rates of smoking—particularly among those deployed—and toxic exposures during military service and after.

Even though lung cancer has the highest mortality rate of all cancers, it is the second most prevalent cancer among VHA-patients (16%), and has by far the most VHA patients (68%) who are diagnosed at stages three or four.2 It received only 3.4% ($35 million) of the $1,000 million in CDMRP cancer funds in FY21, less than every named CDMRP cancer except one.

CDMRP’s Lung Cancer Research Program accelerates high impact, translational research, making it essential to lung cancer patients who are in a race against the clock to find novel, life-saving treatments. While we ask for a major increase for the Lung Cancer Research Program, we strongly support maintaining the overall federal funding level for all cancer programs. We don’t want new funding of any individual cancer to come at the expense of other cancer programs.

With its history of bipartisan support for NCI, CURES, CURES 2.0, ABRA-H and the Cancer Moonshot, we urge Congress to appropriate sixty million dollars for LCRP to better reflect and respect lung cancer’s vast and devastating impact on service members, veterans, and all Americans. Sixty million dollars is a critical, overdue step toward addressing the unmatched burden lung cancer has inflicted upon too many American, their families and their communities. We have been at the back of the line for too long.

Thank you for your thoughtful consideration.
The White Ribbon Project

Promoting action through engagement
Stage IA2 adenocarcinoma, RLL 12/12/17 VATS RLL lobectomy 16 negative lymph nodes Strong advocate LCS Named her dog Royce, after her thoracic surgeon

2007 Dx Stage IIIB adenocarcinoma Chemoradiation, 2 subsequent primary LC - surgery 4th Primary LC, SBRT 2017

Squamous cell carcinoma stage IA1 Discovered 2nd annual LDCT LCS 2/10/21 RUL VATS wedge resection

Ginny Hamlin is no stranger to lung cancer. She's battled the disease three times. And when it came back the fourth time, she wanted to know all her options.

"I was first diagnosed in January 2007 and did 16 rounds of chemotherapy and 35 rounds of radiation," Ginny shares. "It was gone for seven years, and then returned in 2014."

It's clear that Ginny is in it for the long journey.

"While Ginny's lung canc is the largest risk factor for health concern across c has more deaths from it, including breast, prostate, and skin canc, be a si f lung canc. He..."
Thank You!

Hope!

...From the Mountaintops

...It made a difference for that one!
RADON EDUCATION

TEST YOUR HOME FOR RADON

Why is radon dangerous?

Radon comes naturally from rocks and dirt in the ground. There’s always some radon in the air around us. The problem is when radon gas from underneath a home leaks in through cracks or gaps. Too much of it can build up inside.

When you breathe in radon gas, the radioactive particles can get trapped in your lungs. Over time, they can cause lung cancer. The risks from radon depend on two things:

- **How much:** High radon levels are more dangerous.
- **How long:** The more contact you have with radon gas, the greater your risk.

In the United States, radon is the #2 cause of lung cancer after smoking and it is estimated to cause over 20,000 deaths each year.

Smoking makes radon even more dangerous.

Radon and tobacco smoke from cigarettes (and cigars and pipes) can damage your lungs. When they’re combined, smoking and radon are more dangerous than either one on its own.

Smokers who live in homes with high radon levels have a risk of lung cancer that’s 10 times higher than non-smokers who live in homes with high radon levels.

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Any home can have a radon problem.

High radon levels can be a risk anywhere in Kentucky. Both old homes and new homes can have radon problems. So can homes with basements and homes without them. And two houses right next to each other could have very different radon levels. That’s why it’s so important for every home to get tested.

Test Your Home

The good news is that testing your home for radon is easy. You can do it yourself or hire someone to do it for you. Here’s what you need to do:

- **Get a radon test kit.** You can get an affordable kit from a hardware store. You can order one by calling 502-564-4805 or going to the Kentucky State Radon Program website (https://chfs.ky.gov/agencies/dfs/hppts/emb/).
- **Set up the testing device to check the air for radon.** Depending on the type of test, it may take just a few days or many months to finish the test.
- **Send the device to a lab and wait for the results.** If your test results show a radon level of 4 picocuries per liter (pCi/L) or higher, test your home again. If the second test is also high, you need to fix the problem.

If You Have High Radon Levels, Take Action

Finding out that your home has high radon levels can be scary. But you can take steps to make your home safer. Here’s what you need to do:

- **Contact your state radon office** to get the name of a local expert who can give advice. You can fix some radon problems with simple low- or easy-to-correct solutions. For bigger radon problems, you need a specialist — called a mitigation contractor — to fix your home.
- **If needed, repair your home.** Mitigation contractors can help by sealing cracks where radon gets in. They can also put in special pipes that help vent radon from under your home, so it goes outside instead of inside.

Radon in your home can be a serious health risk — but it’s a problem you can fix. If you haven’t tested your home for radon, get a test kit now.

Learn More About Radon

Visit www.cdc.gov/radon

*Source: U.S. Environmental Protection Agency

stelizabeth.com | (850) 301-4072
PROTECT YOUR FAMILY FROM RADON

Radon is in the ground naturally. But sometimes it gets into homes through cracks in the floors or walls.

1 OUT OF 15 HOMES IN THE U.S. HAVE HIGH RADON LEVELS.

Radon is a gas that you can’t see, smell, or taste — but it can be dangerous. It’s the second leading cause of lung cancer in the U.S.

Action is required if your home has a radon level of 4 picocuries per liter (pCi/L) or higher.

TEST YOUR HOME KNOW YOUR LEVEL

Radon and Smoking: A Dangerous Combination

If you live in a home with high radon levels, smoking raises your risk of lung cancer by 10 times.

TAKE THE FIRST STEP

There’s good news — you can protect your family by testing your home for radon.

Learn more by calling the National Radon Hotline: 1-800-767-7236 (SOS-RADON)

Source: U.S. Environmental Protection Agency

stelizabeth.com | (859) 309-4072
RADON AND SECONDHAND SMOKE

WHAT IS IT?
Radon is a naturally occurring radioactive gas that cannot be seen, smelled, or tasted.

WHY IS IT DANGEROUS?
Radon is the 2nd leading cause of lung cancer. Radon attaches to dust or tobacco smoke and gets carried into the lungs.

MOST EXPOSURE OCCURS IN HOMES

NO SAFE LEVEL OF RADON

WHAT CAN YOU DO ABOUT IT?
TEST YOUR HOME
Know your level

Ask a certified radon professional to fix high radon levels.

FOR MORE INFORMATION:
Breathe - University of Kentucky College of Nursing
(859) 335-4587
Breathe.uky.edu

NO SAFE LEVEL OF RADON

SECONDHAND SMOKE

WHAT IS IT?
SHS is a mixture of smoke exhaled by the smoker and smoke from the burning end of tobacco products.

CIGARETTE SMOKE CONTAINS:
MORE THAN 7,000 CHEMICALS AND 69 CAUSE CANCER

SHS is EVERYWHERE

IN CHILDREN, SHS CAUSES:
- Ear infections
- More frequent & severe asthma attacks
- Lung infections
- Sudden infant death syndrome (SIDS)

BREATHING SHS CAUSES:
- Heart Disease
- Lung Cancer
- Stroke

WHAT CAN YOU DO ABOUT IT?

- Only visit smoke-free restaurants & businesses
- Make your car and home 100% tobacco-free.
- Quit smoking & stay away from tobacco smoke.

stelizabeth.com