

**Maryland Department of Health (MDH) Center for Cancer Prevention and Control
Cigarette Restitution Fund Cancer
Prevention, Education, Screening and Treatment (CRF CPEST) Program
Minimal Clinical Elements for Lung Cancer Detection and Diagnosis
Updated March 2023**

Goal: The goal of the Minimal Clinical Elements for Lung Cancer Screening and Diagnosis is to provide evidence-based lung cancer screening and diagnostic guidelines for Maryland Cigarette Restitution Fund Cancer Prevention, Education, Screening and Treatment Program providers.

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Section I: Client Eligibility Criteria

A. Screening

An individual that meets both criteria listed below will be enrolled in the CRF CPEST Program's Lung Cancer Screening Module for screening, diagnostic and, if funds are available, treatment services.

1. An individual who is at High Risk¹ for lung cancer:
 - Anyone, age 50 to 80 years, AND;
 - ≥ 20 pack-year smoking history, AND;
 - Currently smokes or quit smoking in the past 15 years.
2. An individual who meets the residency, income, and health insurance requirements listed below:
 - Is a Maryland resident; AND
 - Has an annual household income $\leq 250\%$ of the federal poverty level; AND
 - Has no health insurance OR has health insurance that does not completely pay for required services OR has health insurance but will need assistance or navigation services to obtain screening, diagnostic and, if applicable, treatment services.

Note:

- 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; however, those who are no longer eligible for curative lung surgery but are eligible for radiotherapy may continue annual lung cancer screening.
- If a person is program eligible and has a prior history of lung cancer, annual lung cancer screening with LDCT may resume 5 years after diagnosis of lung cancer at the discretion of the provider and client (refer to 'Special Situations' on page 5).

B. Diagnostic Referral

An individual who was screened outside of the CRF CPEST program but requires CRF CPEST-funded diagnostic services and meets the three criteria listed below will be enrolled in the CRF CPEST Program's Lung Cancer Diagnostic and Treatment Module for diagnostic and, if funds are available, treatment services.

1. Anyone, age 50 to 80 years, AND;
2. Provides the local CRF CPEST Program with documentation of abnormal finding(s) from a lung cancer screening LDCT and recommended diagnostic work up to rule out lung cancer, AND;
3. Meets the residency, income, and health insurance requirements as listed below:
 - Is a Maryland resident; AND
 - Has an annual household income $\leq 250\%$ of the federal poverty level; AND
 - Has no health insurance OR has health insurance that does not completely pay for required services OF has health insurance but will need assistance or navigation services to obtain screening, diagnostic and, if applicable, treatment services.

Section II: Prerequisite to Receiving an Annual LDCT Lung Cancer Screening

A client enrolled in the CRF CPEST Lung Cancer Screening Module for screening must receive the following services before receiving an annual LDCT lung cancer screening:

1. Client must receive counseling on the importance of maintaining cigarette smoking abstinence if former smoker; or the importance of smoking cessation and must be furnished with information about tobacco cessation interventions if current smoker.
2. Client must receive a written order for LDCT lung cancer screening which is appropriately documented in the client's medical records and meets the following criteria:
 - For initial LDCT lung cancer screening services, the client must receive a written order for a LDCT lung cancer screening during a lung cancer screening counseling and shared decision making visit, furnished by a physician or qualified non-physician practitioner (meaning a physician assistant or nurse practitioner). A lung cancer screening counseling and shared decision making visit includes the following elements:
 - a) Determining the client's eligibility including age, absence of signs or symptoms of lung cancer, calculation of cigarette smoking pack-years² (*Number of packs of cigarettes smoked per day x Number of years smoked = Pack years*); and if a former smoker, the number of years since quitting;
 - b) Making a shared decision with the client, including the use of one or more decision aids, to include benefits and harms of screening, follow-up diagnostic testing, over-diagnosis, false positive rate, and total radiation exposure;
 - c) Counseling on the importance of adherence to annual lung cancer LDCT screening, impact of comorbidities and ability or willingness to undergo diagnosis and treatment;
 - d) Counseling on the importance of maintaining cigarette smoking abstinence if former smoker; or the importance of smoking cessation and furnishing of information about tobacco cessation interventions if current smoker; and
 - e) A written order for lung cancer screening with LDCT.
 - For subsequent LDCT lung cancer screenings, the client must receive a written order for LDCT lung cancer screening, which may be furnished during any appropriate visit with a physician or qualified non-physician practitioner. If a physician or qualified non-physician practitioner elects to provide a lung cancer screening counseling and shared decision making visit for subsequent lung cancer screenings with LDCT, the visit must meet the criteria similar to an initial LDCT counseling and shared decision making visit.
 - Written orders for both initial and subsequent LDCT lung cancer screenings must contain the following information, which must be appropriately documented in the client's medical records:
 - a) Client's date of birth;
 - b) Number of pack-year smoking history;
 - c) Current smoking status, and for former smokers, the number of years since quitting smoking;
 - d) Statement that the client is asymptomatic for lung cancer, though they may have signs or symptoms of other diseases (chronic obstructive pulmonary disease [emphysema and chronic bronchitis]) and pulmonary fibrosis);
 - e) Statement verifying client has been furnished with a counseling and shared decision making visit;
 - f) National Provider Identifier (NPI) of the ordering practitioner.

Section III: Reporting

Computed Tomography (CT) findings should be reported using the most current Lung CT Screening Reporting & Data System (Lung-RADS®)³, located at <https://www.acr.org/Clinical-Resources/Reporting-and-Data-Systems/Lung-Rads>

For reporting of CT findings, please use the ACR–STR Practice Parameter for the Performance and Reporting of Lung Cancer Screening Thoracic Computed Tomography (CT)⁴, available at: <https://www.acr.org/-/media/ACR/Files/Practice-Parameters/CT-LungCaScr.pdf?la=en>

Section IV: Management of Results

Please refer to the most current National Comprehensive Cancer Network (NCCN) Lung Cancer Screening Guidelines for the management of nodules on the initial, follow-up, or annual LDCT⁵, located at <https://www.nccn.org/guidelines/guidelines-detail?category=2&id=1441>

To access the NCCN Lung Cancer Screening and Diagnosis guidelines, program providers and staff will need to create an account at <https://www.nccn.org/>. It is free to create an account. After an account is created, log in to your account using your ID and password, and follow these steps to access the NCCN Lung Cancer Screening and Diagnosis guidelines:

- Click on the “Guidelines” link in the top header.
- Then click on the “Detection, Prevention, and Risk Reduction” link.
- Finally, click on the “Lung Cancer Screening” link.

Note:

- **For Lung-RADS category 3 results**, the ordering provider may refer the client to the appropriate specialist (e.g. Pulmonologist or Thoracic Surgeon) for evaluation and/or possible presentation to the multidisciplinary team.
- **For significant findings unrelated to lung cancer** (e.g. suspicious for other cancers, chronic obstructive pulmonary disease, moderate to severe coronary artery calcification or aortic aneurysm):
 - **If the client has a Primary Care Provider (PCP)**: the local CRF CPEST program will forward copies of reports and refer the client to his/her PCP for follow-up of finding(s).
 - **If the client does not have a PCP**: the local CRF CPEST program will link the client to a PCP and forward copies of the reports for the management of findings and determination of appropriate follow-up of findings other than lung cancer.

Section V: Additional Procedures and Program Coverage

Providers should consult with the local CRF CPEST Program for questions about coverage for payment of procedures. Reimbursement is based on client eligibility and availability of local CRF CPEST Program funds.

Special Situations: If an individual is program eligible and has a prior history of lung cancer, annual lung cancer screening with LDCT may resume 5 years after diagnosis of lung cancer at the discretion of the provider and client. Enrollment into the Lung Cancer Screening Module is on a case-by-case basis. Prior to enrollment, local CRF CPEST programs must first contact the MDH Nurse Consultant for guidance.

Reimbursement for Additional Screening or Diagnostic Procedures: Only procedures recommended in the most current NCCN guidelines, based on imaging or histologic findings, will be CRF CPEST-funded. Additional or alternative procedures are usually not paid for by the CRF CPEST Program. Please contact your local CRF CPEST Program for more information.

Reimbursement for Treatment Procedures: Please contact your local CRF CPEST Program for more information about the coverage of these procedures:

- Surgical or oncology consult visits
- Follow-up surgical or oncology visits
- Chemotherapy
- Radiation Therapy
- Surgery
- Complications related to a CRF CPEST funded diagnostic procedure or treatment
- Palliative care

Section VI: References

1. Final Recommendation Statement. Lung Cancer: Screening. United States Preventive Services Task Force, March 2021.
<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening>
2. Pack Year. National Cancer Institute.
<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/pack-year>
3. Lung CT Screening Reporting & Data System (Lung-RADS®). American College of Radiology. <https://www.acr.org/Clinical-Resources/Reporting-and-Data-Systems/Lung-Rads>
4. ACR–STR Practice Parameter For The Performance And Reporting Of Lung Cancer Screening Thoracic Computed Tomography (CT). American College of Radiology.
<https://www.acr.org/-/media/ACR/Files/Practice-Parameters/CT-LungCaScr.pdf>
5. National Comprehensive Cancer Network. NCCN Guidelines Detection, Prevention, and Risk Reduction. https://www.nccn.org/guidelines/category_2

Section VII: Helpful Links

National Lung Cancer Roundtable Resource Center

This website includes resources for patients, and education and training materials for healthcare teams.

Available at: <https://nlcrt.org/resource-center/>

American College of Radiology Lung Cancer Screening Resources

This website includes resources on screening guidelines, billing information, and status of screening coverage.

Available at: <https://www.acr.org/Clinical-Resources/Lung-Cancer-Screening-Resources>

Section VIII: Lung Cancer Medical Advisory Committee

The following members participated in the formulation of the Minimum Clinical Elements:

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