
The American College of Radiology

**Lung Cancer Screening
Registry**

(LCSR)

Data Dictionary

December 18, 2023



American College of Radiology
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Revisions

Date	Description of Revisions
February 4, 2016	Original issue
February 24, 2016	168, 169, and 170 definition changes from 'Required, if tissue diagnosis is "Malignant"' to "Usage: Required, if tissue diagnosis is anything other than "Benign" or "Malignant – Non-lung cancer"
March 28, 2016	Reformatted the Table of Contents Reformatted headers and footers Item 184 corrected to 'COPD' and removed 'lung cancer' Items 144 through 150, provided additional definitions
April 14, 2017	153 Correction: CT_Exam_Result_Lung_RADS should not have the 'Unknown', U, option. The 'Unknown' option was added to Reason_For_Recall
April 17, 2017	107 Added optional attribute 'New_Medicare_Beneficiary_ID' and Refused_New_Medicare_ID'
April 17, 2018	101 File Version Number
April 17, 2017	102 Added optional attributes: Facility ID
April 26, 2016	120 Invasive detailed definition provided
May 13, 2016	134 changed from Required to Optional 135 changed from Required to Optional
March 24, 2017	124 Number of pack-years of smoking, Unknown = 999 125 Number of years since quit, unknown = 99 110 Patient Sex – added "indicate patient's sex at birth" 184 COPD – removed Family history ...other than first degree relative
April 21, 2017	173 M1c = Additional nodule in contralateral lung
May 16, 2017	170 Changed N3 option to Unknown
July 10, 2017	134 is now, Ordering Practitioner NPI (was Ordering Practitioner First Name) 135 is now, Ordering Practitioner First Name (was Ordering Practitioner Last Name) 136 is now, Ordering Practitioner Last Name (was Ordering Practitioner NPI)
October 18, 2017	Combining Case Registration and Exam Forms
October 18, 2017	107 Patient_Height and Patient_Weight: added 2 decimal points. Valid values have been updated to 0.00<=Patient_Height<=99.99, 0.00<=Patient_Weight<=999.99. Integer value can be used (without decimal points). Tube_Current_Time: format have been updated to 'nnn.n' (added decimal points). Valid values: 0.0-999.9. Integer value can be used (without decimal points). CT_Exam_Result_Lung_RADS: option U='Unknown' has been added as one of Valid Values. What_Were_The_Other_Findings: 5 ('Other clinically significant abnormalities') and 9 ('Unknown') options have been added to the set of Valid Values. Tissue_Diagnosis: 8 ('Clinical – without histology') and 99 ('Unknown') options have been added to the set of Valid Values."
January 3, 2018	151 "Unknown" added to "CT exam result by Lung-RADS category" 154 "Other clinically significant abnormalities" and "Unknown" added to "What were the other findings?" 163 "Clinical – without histology" and "Unknown" added to "Tissue diagnosis"
October 25, 2018	100 Added Version Number 104 Changed Patient Social Security Number usage 105 Changed "Medicare Beneficiary ID" to "Old Medicare Beneficiary ID". Changed usage. 105.1 Added "New Medicare Beneficiary ID". 145 Added "Do not include topogram." 146 Added "Do not include topogram."
November 7, 2018	105/105.1 If both the old Medicare Beneficiary ID and the new Medicare Beneficiary ID fields are null, the exam will not be submitted to CMS. If the patient is a Medicare patient, and the patient's Medicare Beneficiary ID is not available, it is acceptable to enter the patient's insurance number in the old Medicare Beneficiary ID field.
January 10, 2019	135 changed from Optional to Required 137 changed from Required to Optional
January 22, 2019	125 Number of packs-years of smoking changed to 0.1 to 999.9
January 31, 2019	132 Added "Other, specify" 151 Added "Lung-RADS version used to report details- 1.0, 1.1, Other/unknown" 159.1 Added "Follow-up Unique ID" 171 Added additional descriptors: IA1, IA2, IA3, IIC, IVA, and IVB 172 Added additional descriptors: Tis, T1mi and T1c 175 is now AJCC Cancer Staging Manual edition used for staging (was 'Not used') 180 Added "Other, specify"

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April 26, 2019	151.1 Added optional attributes: Reason for Recall 151.2 Added optional attributes: Reason for Recall, other, specify 175 changed from required to required if overall stage or T, N, or M status reported
May 15, 2019	102 No longer used, previously Facility NPI 131.1 Added "Other comorbidities, please specify" 132.1 Added "Cancer related history, other cancer specify" 152 No longer used, previously Reason for Recall (now 151.1) 179.1 Added "Occupational exposures to agents that are identified specifically as carcinogens targeting the lungs – Other"
May 29, 2019	125 changed from Optional to Required 177 changed from Optional to Required
May 30, 2019	154 changed from Required to Optional
July 11, 2019	105, "Old Medicare Beneficiary ID", description changed 105.1, "New Medicare Beneficiary ID", description changed 126, "Number of years since quit", format changed from 1 to 2 decimal places 127, "Did physician provide smoking cessation guidance to patient?", clarified 128, "Is there documentation of shared decision making?", clarified 140.1, "CT scanner name", added 143, "CTDIvol", 0 added to indicate "unknown" 144, "DLP", 0 added to indicate "unknown"
October 8, 2019	100 Reference to Version 1.1 removed
December 17, 2019	158, "Prior history of lung cancer – CT exam result modifier C", changed to optional if Lung-RADS version used to report results not = 1.0 170, "Stage – clinical or pathologic", changed to optional if "Follow-up diagnostic" = "PET/CT" 171, "Overall stage", changed to optional if "Follow-up diagnostic" = "PET/CT" 172, "T status", changed to optional if "Follow-up diagnostic" = "PET/CT" 173, "N status", changed to optional if "Follow-up diagnostic" = "PET/CT" 174, "M status", changed to optional if "Follow-up diagnostic" = "PET/CT"
February 7, 2020	129, Values changed to between 0 and 99.99 130, Values changed to between 0 and 999.99
February 20, 2020	150 Values changed to between 0.00 and 9.99. If unknown, enter 0.
March 20, 2020	129 Values changed to between 0.00 and 99.00. If unknown, enter 0. 130 Values changed to between 0.00 and 999.00. If unknown, enter 0.
April 28, 2020	121.1 "Rescheduled examination" added 121.2 "Originally Scheduled Examination Date" added 121.3 "Reschedule Reason" added 131.2 "COVID Diagnosis" added 131.3 "COVID Diagnosis Date" added 131.4 "COVID Testing Status" added
May 28, 2020	121.3 "Reschedule Reason" language changed to "Indicate the date on which the exam was previously scheduled. If the exam has been rescheduled multiple times, use the first originally scheduled date of exam."
June 9, 2020	131.2, 131.3, 131.4, Added "Only one COVID diagnosis/diagnosis-date/testing-status combination can be reported. If the patient has tested positive at any time, report: Diagnosis: positive Diagnosis date: first positive diagnosis date Testing status: result positive. Otherwise, use the latest diagnosis/diagnosis-date/testing-status available. Enter whatever COVID information is known at the time the screening exam is submitted. It isn't necessary to update the information after that."
June 23, 2020	159 Usage changed to "Optional if Prior history of lung cancer - CT exam result modifier C (#158) = "Yes" or "Null"; not applicable otherwise. 163 "Malignant - other" added
July 15, 2020	163 Language added to address multiple diagnoses
July 28, 2020	121.3 Language added to reflect COVID/coronavirus only 131.2 Language added to reflect COVID/coronavirus only 131.3 Language added to reflect COVID/coronavirus only
August 28, 2020	131.4 Usage language updated, "...otherwise, this field is not applicable" removed
September 17, 2020	131.2 Language changed from 'Diagnosis: positive' to 'Diagnosis: Yes' 131.3 Language changed from 'Diagnosis: positive' to 'Diagnosis: Yes' 131.4 Language changed from 'Diagnosis: positive' to 'Diagnosis: Yes'
October 13, 2020	113 Added 'VA' and 'Other, Specify' 113.1 Added 'Health Insurance, Other, specify' 121.1 Language added to reflect 'Not Applicable to Version 1.2' 121.2 Language added to reflect 'Not Applicable to Version 1.2' 121.3 Language added to reflect 'Not Applicable to Version 1.2' 131.2 Language added to reflect 'Not Applicable to Version 1.2' 131.3 Language added to reflect 'Not Applicable to Version 1.2' 131.4 Language added to reflect 'Not Applicable to Version 1.2' 132 Language changed from 'H&N Cancer' to 'Head & Neck Cancer' and from 'Other, Please Specify' to 'Other cancer related history, please specify,' Usage language updated to reflect versions 1.2 & 1.3 132.1 Usage language updated to reflect versions 1.2 & 1.3

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	<p>133 Usage language updated to reflect versions 1.2 & 1.3</p> <p>154 Added 'Emphysema, moderate or severe' and 'No clinically significant or potentially significant abnormalities,' applicable to Version 1.4</p> <p>154.1 Added 'Other clinically significant abnormalities, please specify', applicable to Version 1.4, moved to 157.1</p> <p>163 Added 'Malignant, (not adenocarcinoma), lung cancer, non-invasive,' 'Malignant, (not adenocarcinoma), lung cancer, invasive status unknown' and 'Other, specify', applicable to Version 1.4</p> <p>176 Usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p> <p>178 Added 'Unknown', applicable to Version 1.4, usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p> <p>179 Added 'Coal smoke,' 'Soot', 'None' and 'Unknown', applicable to Version 1.4, removed '...specifically...' from title, usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p> <p>181 Usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p> <p>183 Added 'Unknown', applicable to Version 1.4, usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p> <p>184 Added 'Unknown', applicable to Version 1.4, usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p> <p>185 Added 'Unknown', applicable to Version 1.4, usage language changed to 'Required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 55 years of age OR "Number of packs-year of smoking" (#125) is less than 30 OR "Number of years since Quit" (#126) is more than 15 (Version 1.4 only).'</p>
April 29, 2021	<p>100 Language added to reflect versions 1.4 and 1.5</p> <p>111 'American Indian' and 'Alaska Native' fields combined, 'Other' added</p> <p>113 Language added to reflect versions 1.4 and 1.5</p> <p>113.1 Language added to reflect versions 1.4 and 1.5</p> <p>131.5 "COVID vaccine" added</p> <p>131.6 "COVID vaccine date" added</p> <p>131.7 "COVID vaccine manufacturer" added</p> <p>131.8 "COVID vaccine manufacturer, other" added</p> <p>131.9 "COVID vaccine site" added</p> <p>154 Language added to reflect versions 1.4 and 1.5</p> <p>157.1 Language added to reflect versions 1.4 and 1.5</p> <p>163 Language added to reflect versions 1.4 and 1.5</p> <p>178 Language added to reflect versions 1.4 and 1.5</p> <p>179 Language added to reflect versions 1.4 and 1.5</p> <p>179.2 Language added to reflect versions 1.4 and 1.5</p> <p>181 Language added to reflect versions 1.4 and 1.5</p> <p>183 Language added to reflect versions 1.4 and 1.5</p> <p>184 Language added to reflect versions 1.4 and 1.5</p> <p>185 Language added to reflect versions 1.4 and 1.5</p>
July 9, 2021	<p>100 Removed reference to version 1.2</p> <p>176 "Education level" moved to 113.2 (element 176 no longer used)</p> <p>177 "Education level, other" moved to 113.3 (element 177 no longer used)</p> <p>Added header text for section 6C (pages 36-39)</p>
July 23, 2021	<p>Removed relevant references to version 1.2</p> <p>Renumbered relevant references from section 6 to section 5</p> <p>Added "Not applicable to Versions 1.4 and 1.5" where applicable</p> <p>167 Usage edited</p> <p>170 Usage edited</p> <p>171 Usage edited</p> <p>179.2 "(Versions 1.4 and 1.5 only) Unknown whether there is a history of cancers associated with an increased risk of a new primary lung cancer" added</p>
August 4, 2021	163.1 "Tissue diagnosis, Other, please specify" added
September 23, 2021	124 Editorial change made

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October 25, 2021	<p>100 Removed references to Versions 1.3 and 1.4</p> <p>104 Usage text changed</p> <p>105 Usage text changed</p> <p>105.1 Usage text changed</p> <p>106 Usage text changed</p> <p>113 Removed reference to Version 1.4</p> <p>113.1 Removed reference to Version 1.4</p> <p>132 No longer used, previously "Cancer Related History"</p> <p>132.1 No longer used, previously "Cancer Related History, Other Cancer Specify"</p> <p>133 No longer used, previously "Cancer Related History, Other Specify"</p> <p>153 Usage text changed</p> <p>154 Removed reference to Version 1.4</p> <p>157.1 Removed reference to Version 1.4</p> <p>163 Removed reference to Version 1.4</p> <p>178 Removed reference to Version 1.4</p> <p>179 Removed reference to Version 1.4</p> <p>179.2 Language added, removed reference to Version 1.4</p> <p>181 Removed reference to Version 1.4</p> <p>183 Removed reference to Version 1.4</p> <p>184 Removed reference to Version 1.4</p> <p>185 Removed reference to Version 1.4</p>
December 4, 2021	<p>100 Removed reference to Version 1.5</p> <p>109 Added language to "Type of Response"</p> <p>164 Usage language updated</p> <p>165 Usage language updated</p> <p>167 "Histology" changed to "Histology of primary or dominant cell type"</p> <p>168 "Histology" changed to "Histology of primary or dominant cell type"</p> <p>169.1 "Histology of secondary cell type" added</p> <p>169.2 "Histology of secondary cell type - Non-small cell lung cancer" added</p> <p>169.3 "Other non-small cell lung cancer histology - secondary cell type, specify" added</p>
March 12, 2022	<p>Removed references to CMS.</p> <p>125 Clarified "unknown" value for "Number of pack-years of smoking".</p> <p>126 Clarified "unknown" value for "Number of years since quit".</p> <p>The conditions under which the following field are required changed. They are now required for patients who are under 50, rather than under 55, or whose pack-year history is less than 20 rather than less than 30:</p> <ul style="list-style-type: none"> 178 Radon exposure 179 Occupational exposures 179.2 History of cancers associated with an increased risk of lung cancer 181 Lung cancer in first-degree relative 183 COPD 184 Pulmonary fibrosis 185 Secondhand smoke exposure <p>The conditions under which the following fields are required changed. They are now required if "Tissue diagnosis" = "Malignant, not adenocarcinoma, lung cancer, non-invasive" or "Malignant, not adenocarcinoma, lung cancer, invasive status unknown", rather than optional:</p> <ul style="list-style-type: none"> 167 Histology of primary or dominant cell type 170 Stage – clinical or pathologic 171 Overall stage
March 29, 2022	125 Clarifying language for unknown options.
May 13, 2022	104-106 Usage language updated.
May 31, 2022	105.1 Clarifying language for New Medicare Beneficiary ID added
June 8, 2022	<p>105 Edited to reflect Old Medicare Beneficiary ID</p> <p>105.1 Edited to reflect New Medicare Beneficiary ID</p>
August 13, 2022	<p>101.1 Exam Unique ID added</p> <p>104 Usage language clarified for versions 1.5 and 1.6</p> <p>105 Usage language clarified for versions 1.5 and 1.6</p> <p>105.1 Usage language clarified for versions 1.5 and 1.6</p> <p>106 Usage text added</p> <p>107 "Type of Response" text updated</p> <p>108 "Type of Response" text updated</p> <p>109 "Type of Response" text updated</p> <p>127 Usage language clarified for versions 1.5 and 1.6</p> <p>128 Usage language clarified for versions 1.5 and 1.6</p> <p>131.9 Usage language clarified for versions 1.5 and 1.6</p> <p>135 Usage language clarified for versions 1.5 and 1.6</p>

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	136 Usage language clarified for versions 1.5 and 1.6, asterisked text moved to 135 137 Usage language clarified for versions 1.5 and 1.6 151.3 Usage language clarified for versions 1.5 and 1.6 158 Usage language clarified for versions 1.5 and 1.6 173 Edited N3 to reflect not applicable to version 1.6 175 Usage language clarified for versions 1.5 and 1.6
October 1, 2022	Removed references to version 1.5 151.3 No longer used, previously "Lung-RADS used to report results"
October 13, 2022	Edits made to the following elements for consistency across documents: 101, 121, 124, 129, 130, 143, 144, 145, 146, 147, 148, 149, 150, 159, 169.1, 173, 175, 178, 179, 179.2, 181, 182, 183, 184, 185
December 17, 2022	138 Changed to 'Lung cancer' 139 Defining language, additional option added 151.3 Element Restored 163, 163.1, 164, 165, 167, 170-174 "Tissue diagnosis" changed to "Tissue/cytology diagnosis"
April 29, 2023	172 'T0' added as additional option
September 30, 2023	151.3 Added "IP: Inflammatory or Infectious Process)
October 12, 2023	101.1 Clarifying language added
December 18, 2023	151 Renamed to "CT screening exam result by Lung-RADS category" 162.1 Added "CT diagnostic exam result by Lung-RADS category" 162.2 Added "Reason for diagnostic recall" 162.3 Added "Reason for diagnostic recall, unable to complete, please specify" 169.01 Added "Other histology of primary or dominant cell type, please specify" 169.3 Added "Other Non-small cell lung cancer histology, secondary cell type, please specify"

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Exam Form: Facility and Patient Information

100 File Version Number

Usage: Required

Type of Response: Numeric

101 Facility ID number

Unique facility identifier within NRDR; a 6-digit number generated by NRDR

Usage: Required.

101.1 Exam Unique ID

A unique identifier of an exam within the partner network. Protected Health Information (including actual or hashed Medical Record Number, Social Security Number, etc.) should not be used to construct the exam unique identifier.

Usage: Optional

102 NO LONGER USED

103 Patient ID

Field for NRDR Patient ID to support searching of records by facility.

This is specific to manual submission only.

Usage: (auto-generated by NRDR)

Type of Response: Text

Exam Form: Facility and Patient Information

104 Patient Social Security Number

Usage: Optional. However, one of the following patient identifiers must be provided: Social Security Number, Old Medicare Beneficiary ID, New Medicare Beneficiary ID, Other ID.

105 Old Medicare Beneficiary ID (issued before April 1, 2018)

Usage: Optional. However, one of the following patient identifiers must be provided: Social Security Number, Old Medicare Beneficiary ID, New Medicare Beneficiary ID, Other ID.

Type of Response: Text up to 12 characters (*the field will allow an alpha-numeric answer*).

105.1 New Medicare Beneficiary ID (issued on April 1, 2018, or later)

Usage: Optional. However, one of the following patient identifiers must be provided: Social Security Number, Old Medicare Beneficiary ID, New Medicare Beneficiary ID, Other ID. Note: When completing this field, please use the ID provided by CMS, which contains specific placements of characters within the ID (please consult the [LCSR file specifications](#) for additional information on CMS-issued Medicare Beneficiary ID format).

Type of Response: Must be alphanumeric formatted as follows:

- Position 1 – numeric values 1 thru 9
- Position 2 – alphabetic values A thru Z (minus S, L, O, I, B, Z)
- Position 3 – alpha-numeric values 0 thru 9 and A thru Z (minus S, L, O, I, B, Z)
- Position 4 – numeric values 0 thru 9
- Position 5 – alphabetic values A thru Z (minus S, L, O, I, B, Z)
- Position 6 – alpha-numeric values 0 thru 9 and A thru Z (minus S, L, O, I, B, Z)
- Position 7 – numeric values 0 thru 9
- Position 8 – alphabetic values A thru Z (minus S, L, O, I, B, Z)
- Position 9 – alphabetic values A thru Z (minus S, L, O, I, B, Z)
- Position 10 – numeric values 0 thru 9
- Position 11 – numeric values 0 thru 9

Exam Form: Facility and Patient Information

106 Other Identification

Unique patient ID.

Usage: Optional if "Patient Social Security Number" (#104), "Old Medicare Beneficiary ID" (#105) or "New Medicare Beneficiary ID" (#105.1) is reported.

Must be a unique patient identifier, such as Medical Record Number. If a facility reports data for a patient in more than one NRDR screening registry*, then the same "Other Identification" must be used for that patient in all registries.

*The NRDR screening registries are

- CT Colonography Registry (CTC)
- Lung Cancer Screening Registry (LCSR)
- National Mammography Database (NMD)

Type of Response: Text

107 Patient's First Name

Field to help local facility search for a patient record.

Usage: Optional.

Type of Response: Text. Combinations of letters and spaces up to 50 characters long. An apostrophe (') and hyphen (-), are also allowed, and an initial followed by a period.

108 Patient's Middle Name

Field to help local facility search for a patient record.

Usage: Optional.

Type of Response: Text. Combinations of letters and spaces up to 50 characters long. An apostrophe (') and hyphen (-), are also allowed, and an initial followed by a period.

109 Patient's Last Name

Field to help local facility search for a patient record.

Usage: Optional.

Type of Response: Text. Combinations of letters and spaces up to 50 characters long. An apostrophe (') and hyphen (-), are also allowed, and an initial followed by a period.

Exam Form: Facility and Patient Information

110 Patient Sex

Indicate patient's sex at birth.

Usage: Required.

Type of Response: Select one:

- Male
 - Female
 - Other
 - Unknown
-

111 Patient Race

Usage: Optional.

Type of Response: Select all that apply:

- American Indian or Alaska Native
 - Asian
 - Black or African American
 - Native Hawaiian or Pacific Islander
 - White
 - Other
 - Not reported
 - Unknown
-

112 Patient Ethnicity (Hispanic origin)

Usage: Optional.

Type of Response: Select one:

- Hispanic or Latino
 - Not Hispanic or Latino
 - Not reported
 - Unknown
-

113 Health Insurance

Usage: Optional.

Type of Response: Select all that apply:

- Medicare
 - Medicaid
 - Private insurance
 - Self-pay
 - VA
 - Other, specify
 - Unknown
-

Exam Form: Facility and Patient Information**113.1 Health Insurance, Other, specify**

Usage: Required if "Health Insurance" (#113) = "Other, specify"; otherwise, this field is not applicable.

Type of Response: Text

113.2 Education level

Usage: Optional.

Type of Response: Select one:

- 8th grade or less
- 9-11th grade
- High school graduate or high school equivalency
- Post high school training, other than college (for example, Vocational/technical school)
- Associate degree / some college
- Bachelor's degree
- Graduate or Professional school
- Other, please specify
- Unknown / Refused to answer

113.3 Education level, other

Usage: Required if "Education level" (#113.2) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: Text

114 Patient's Date of Birth

Usage: Required.

Type of Response:

- mm/dd/yyyy format; cannot be a future date.
Must be less than or equal to date of death.

115 Patient's Date of Death

Usage: Optional.

Type of Response:

- mm/dd/yyyy format; cannot be a future date.
Must be greater than or equal to date of birth.

Exam Form: Facility and Patient Information

116 How the Cause of Death Was Determined

Usage: Optional if date of death is provided; not applicable otherwise.

Type of Response: Select one:

- Autopsy Report
- Death Certificate
- Medical Record
- Physician
- Relative or Friend
- Social Security Death Index
- Other

117 How Cause of Death Was Determined 'Other'

Usage: Usage: Required if "Other" is selected for how cause of death was determined (#116); not applicable otherwise.

Type of Response: Text

118 Cause of Death

Usage: Required if "Patient date of death" (#115) is provided; not applicable otherwise.

Type of Response: Select one:

- Lung cancer
- Non-lung cancer cause, specify if known
- Cannot determine

119 Non-lung cancer cause of death, specify if known

Usage: Optional if "Cause of Death" (#118) = "Non-lung cancer cause, specify if known"; otherwise, this field is not applicable.

Type of Response: Text

Exam Form: Facility and Patient Information**120 Invasive procedure within 30 days prior to death**

Was there an invasive procedure on the patient during the 30-day period preceding the patient's death?

Usage: Required if "Patient date of death" (#115) is provided.

Include only invasive procedures as they relate to lung cancer screening abnormalities that may be cancer and are being evaluated.

For example:

- a) Percutaneous biopsy lung, liver, adrenal, lymph node
- b) Thoracoscopy, with or without biopsy or lung resection
- c) Thoracotomy, with or without biopsy or lung resection
- d) Mediastinoscopy, with or without biopsy or lung resection
- e) Bronchoscopy with or without biopsy
- f) Thoracentesis

Do not include invasive procedures in other body parts or to work up diseases, symptoms, etc., that are not related to lung cancer screening or lung cancer.

Type of Response: Select one:

- Yes
- No
- Unknown

121 Examination Date

Usage: Required. Must be greater than 1/1/2000 and greater than the date of birth.

Cannot be a future date.

Type of Response: mm/dd/yyyy

121.1 Rescheduled Examination

Indicate if this exam was previously scheduled on an earlier date and changed for any reason.

Usage: Optional.

Type of Response: Select one:

- Yes
- No
- Unknown

121.2 Originally Scheduled Examination Date

Indicate the date on which the exam was previously scheduled. If the exam has been rescheduled multiple times, use the first originally scheduled date of exam.

Usage: Optional. **Cannot be a future date**

Type of Response: mm/dd/yyyy

Exam Form: Facility and Patient Information**121.3 Rescheduled Reason**

Indicate the primary reason the exam was rescheduled.

Usage: Optional.

Type of Response: Select one:

- Patient reason: COVID/coronavirus related (Any patient rescheduling of COVID such as fear of virus transmission, travel restrictions, patient actively ill with COVID)
- Patient reason: Other (Any non-COVID reason initiated by the patient – such as patient inconvenience, missed appointment)
- Facility reason: COVID/coronavirus related (Any facility initiated rescheduling due to response to COVID including physician unavailable due to COVID support, non-essential exams discontinued)
- Facility reason: Other (Any non-COVID reason initiated by the facility – such as physician inconvenience, equipment issue)
- Unknown

122 Name of person who completed this paper form – First name

Indicate the first name of the person who completed the paper form.

Usage: Required.

Only applicable for manual data entry. For other data entry methods, these fields are auto-populated.

Type of Response: Text

123 Name of person who completed this paper form – Last name

Indicate the last name of the person who completed the paper form.

Usage: Required.

Only applicable for manual data entry. For other data entry methods, these fields are auto-populated.

Type of Response: Text

Exam Form: General, Appropriateness of Screening (Section 5A1 – 5A7)**124 Smoking Status**

Smoking status as reported by the ordering practitioner on the order form. Note: The *#### codes below are from the National Cancer Index Thesaurus.

Usage: Required.

Type of Response: Select one:

- Current smoker (*C67147, an adult who has smoked 100 cigarettes in his or her lifetime and who currently smokes cigarettes. Includes daily smokers and non-daily smokers, also known as occasional smokers)
- Former smoker (*C67148, a person who was not smoking at the time of the interview but has smoked at least 100 cigarettes in their life)
- Never smoker (*C65108, a person who was not smoking at the time of the interview and has smoked less than 100 cigarettes in their life)
- Smoker, Current Status Unknown (*C671504, indicates a person who is known to have smoked but whose current smoking status is unknown)
- Unknown If Ever Smoked (*C67151, indicates that a person's smoking is unknown)

125 Number of pack-years of smoking (cigarettes)*

Pack-years as reported by the ordering practitioner on the order form. Pack-years is defined as (number of packs per day) x (total years smoked).

Usage: Required if Smoking Status (#124) = "Current Smoker, Former Smoker, or Smoker, current status unknown"; otherwise, this field should be left blank.

Type of Response: number between 0.1 and 999.9

If unknown, enter a number equal to or greater than 999.

*Pack-years should not include cigars, e-cigs, or chewing tobacco. Calculate the pack-years for cigarettes only.

Exam Form: General, Appropriateness of Screening (Section 5A1 – 5A7)**126 Number of years since quit**

Usage: Conditional. Required if "Smoking status" (#124) = "Former smoker"; otherwise, this field is not applicable.

Type of Response: number between 0.01 and 99.99. If less than 1.0, the leading 0 must be entered. For example:

1/12=0.08

2/12=0.17

3/12=0.25

4/12=0.33

5/12=0.42

6/12=0.5

7/12=0.58

8/12=0.67

9/12=0.75

10/12=0.83

11/12=0.92

12/12=1

If unknown, enter a number equal to or greater than 99.

127 Did physician provide smoking cessation guidance to patient?

This applies to guidance provided by either the ordering or imaging physician. For annual exams, for which no additional guidance has been provided other than at the baseline exam, enter "no".

Usage: Optional

Type of Response: Select one:

- Yes
- No
- Unknown

128 Is there documentation of shared decision making?

For annual exams, for which no additional shared decision-making visit has occurred other than the visit for the baseline exam, enter "no".

Usage: Optional

Type of Response: Select one:

- Yes
- No
- Unknown

129 Patient's height (inches)

Usage: Required.

Type of Response: Numeric value between 0 and 99.00. If unknown, enter 0 or ≥ 99.00.

Exam Form: General, Appropriateness of Screening (Section 5A1 – 5A7)**130 Patient's weight (lbs)**

Usage: Required.

Type of Response: Numeric value between 0 and 999.00. If unknown, enter 0 or ≥ 999.00.

131 Other comorbidities listed on patient record that limit life expectancy

Usage: Optional.

Type of Response: Select all that apply:

- COPD
- Emphysema
- Pulmonary Fibrosis
- Coronary Artery Disease
- Congestive Heart Failure
- Peripheral Vascular Disease
- Lung Cancer
- Cancer other than lung cancer
- Other, please specify

131.1 Other comorbidities, please specify

Usage: Required if "Other comorbidities" (#131) = "Other, specify"; otherwise, this field is not applicable.

Type of Response: Text

Exam Form: General, Appropriateness of Screening (Section 5A1 – 5A7)**131.2 COVID diagnosis**

Indicate if the patient had a documented diagnosis of COVID/coronavirus as determined by a clinician (with or without testing). Only one COVID diagnosis/diagnosis-date/testing-status combination can be reported. If the patient has tested positive at any time, report:

Diagnosis: Yes

Diagnosis date: first positive diagnosis date

Testing status: result positive.

Otherwise, use the latest diagnosis/diagnosis-date/testing-status available.

Enter whatever COVID information is known at the time the screening exam is submitted. It isn't necessary to update the information after that.

Usage: Optional.

Type of Response: Select one:

- Yes
- No
- Unknown

131.3 COVID diagnosis date

Indicate the first date of COVID/coronavirus diagnosis as documented by a clinician. Only one COVID diagnosis/diagnosis-date/testing-status combination can be reported. If the patient has tested positive at any time, report:

Diagnosis: Yes

Diagnosis date: first positive diagnosis date

Testing status: result positive.

Otherwise, use the latest diagnosis/diagnosis-date/testing-status available.

Enter whatever COVID information is known at the time the screening exam is submitted. It isn't necessary to update the information after that.

Usage: Required if "COVID diagnosis" (#131.2) = "Yes"; otherwise, this field is not applicable.

Type of Response:

- mm/dd/yyyy format; cannot be a future date.

Exam Form: General, Appropriateness of Screening (Section 5A1 – 5A7)**131.4 COVID testing status**

Indicate whether the patient received COVID testing and the results, if known. Only one COVID diagnosis/diagnosis-date/testing-status combination can be reported. If the patient has tested positive at any time, report:

Diagnosis: Yes

Diagnosis date: first positive diagnosis date

Testing status: result positive.

Otherwise, use the latest diagnosis/diagnosis-date/testing-status available.

Enter whatever COVID information is known at the time the screening exam is submitted. It isn't necessary to update the information after that.

Usage: Required if "COVID diagnosis" (#131.2) = "Yes".

Type of Response: Select one:

- Tested: Positive Result
- Tested: Negative Result
- Tested: Result Inconclusive
- Testing not performed
- Unknown

131.5 COVID vaccine

Indicate if the patient has received a vaccination for COVID/coronavirus. Report only vaccinations received prior to the examination. If more than one vaccination was received prior to the exam, report the most recent.

Usage: Optional

Type of Response: Select one:

- Yes
- No
- Unknown

131.6 COVID vaccine date

Indicate when the COVID vaccine was given.

Usage: Optional. If "COVID vaccine" (#131.5) = "No" or "Unknown," this field is not applicable.

Range: A date greater than or equal to 1/1/2020 in mm/dd/yyyy format. **Cannot be a future date.**

Exam Form: General, Appropriateness of Screening (Section 5A1 – 5A7)**131.7 COVID vaccine manufacturer**

Indicate the manufacturer of the COVID vaccine the patient received.

Usage: Optional. Required if “COVID vaccine” (#131.6) = “Yes”; otherwise, this field should be blank.

Type of Response: Select one:

- Johnson & Johnson Jansen
- Moderna
- Novavax
- Oxford-AstraZeneca
- Pfizer- BioNTech
- Unknown
- Other, please specify

131.8 COVID vaccine manufacturer, other

Usage: Required if “COVID vaccine manufacturer” (#131.7) = “Other, please specify”; otherwise, this field is not applicable.

Type of Response: Text

131.9 COVID vaccine site

Indicate the patient’s COVID vaccination site.

Usage: Optional

Type of Response: Select one:

- Right arm
- Left arm
- Other
- Unknown

132 NO LONGER USED**132.1 NO LONGER USED****133 NO LONGER USED**

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)**134 Radiologist (reading) NPI***

Usage: Required.

Type of Response: 10-digit integer

*Add all reading radiologists to the [Manage Physicians](#) list in the NRDR portal in order for the NPI, last, and first name to auto-fill.

135 Ordering practitioner NPI*

Usage: Optional (applicable to version 1.6), otherwise required.

Type of Response: 10-digit integer

*Ordering practitioners cannot be added to the [Manage Physicians](#) list within the NRDR.

136 Ordering practitioner's first name

Usage: Optional

Type of Response: Text

137 Ordering practitioner's last name

Usage: Optional

Type of Response: Text

138 Indication for Exam: Are there are signs or symptoms of lung cancer:

Usage: Required.

Type of Response: Select one:

- No
- Yes

139 Indication for Exam: Are there any signs or symptoms of lung cancers – If 'No'

Usage: Required if "Indication for Exam: Signs and Symptoms of Lung Cancer" (#138) = "No"; otherwise, this field is not applicable.

If answer to "Signs or symptoms of lung cancer" is "N" then select one of the following:

- Baseline scan (prevalence screen; baseline scan indicates the patient has had no prior lung cancer screening CTs.)
- Annual screen (incidence screen, aka subsequent screens; annual screen indicates the patient is in a screening program and has had at least one prior screening exam.)
- Non-screening Chest CT assigned a Lung-RADS score and used in lieu of an annual screen to avoid repeat scanning

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)**140 Modality**

Usage: Required.

Type of Response: Select one:

- Low dose chest CT
- Routine chest CT

140.1 CT scanner name

If a scanner has been added for LCSR using the [Manage Scanners](#) link in the NRDR portal, then it will appear on a drop-down menu for this field. If selected, Fields 141 (CT scanner manufacturer) and 142 (CT scanner model) will be automatically populated.

Usage: Optional.

Type of Response: Text

141 CT scanner manufacturer

Usage: Required.

Type of Response: Text

142 CT scanner model

Usage: Required.

Type of Response: Text

143 CTDIvol (mGy)

Volume Computed Tomography Dose Index- standardized parameter to measure scanner radiation output. Obtained from scanner dose report (patient protocol page or similar) or operator console (after completion of scan). Typically, less than 3.0 mGy for a standard sized patient but can be lower for small patients and higher for larger patients. Do not include the topogram.

Usage: Required.

Type of Response: numeric value, any number ≥ 0.01 and ≤ 999.99 . If unknown, enter 0.

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)

144 DLP (mGy*cm)

Dose Length Product- product of the length of the irradiated scan volume and the average CTDIvol over that distance. Obtained from scanner dose report (patient protocol page or similar) or operator console (after completion of scan). Do not include the topogram.

Usage: Required.

Type of Response: numeric value, any number ≥ 0.01 and ≤ 9999.99 . If unknown, enter 0.

145 Tube current-time (mAs)

The product of tube current and exposure time per rotation, expressed in units of milliamperere x seconds (mAs) (average across scan). This may be obtained from scanner dose report (patient protocol page or similar), from the scanner operator console or the DICOM header of screening CT images. Do not include the topogram.

Usage: Optional.

Type of Response: numeric value, any number ≥ 0.0 and ≤ 999.9 .

146 Tube voltage (kV)

The electric potential applied across an x-ray tube to accelerate electrons towards a target material, expressed in units of kilovolts (kV).

Usage: Optional.

Type of Response: numeric value, any number ≥ 0 and ≤ 999 .

147 Scanning time (s)

Total time it takes to complete the scan from beam 'on' to beam 'of'. This may be obtained from the scanner operator console (typically not contained in DICOM header of screening CT images or dose report). Rotation time over the entire scan refers to the helical scan and does not include the topogram.

Usage: Optional.

Type of Response: numeric value, any number ≥ 0.01 and ≤ 999.99 .

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)

148 Scanning volume (cm)

The full length or extent of the scan (Total scan range from head to foot). This may be obtained from the scanner operator console (typically not contained in the DICOM header of the screening CT images or dose report (RDSR)). Do not include the topogram.

Usage: Optional.

Type of Response: numeric value, any number ≥ 0.01 and ≤ 999.99 .

149 Pitch

Unitless parameter used to describe table travel during helical scan; equal to table travel (mm) per gantry rotation / total nominal beam width (mm). This may be obtained from the scanner operator console, the DICOM header of the screening CT images or the dose report (RDSR).

Usage: Optional.

Type of Response: numeric value, any number ≥ 0.000 and ≤ 99.999 .

150 Reconstructed image width (nominal width of reconstructed image along z-axis) (mm)

The thickness of each slice post processing (slice thickness) in mm. This may be obtained from the scanner operator console, the DICOM header of the screening CT images or dose report (RDSR).

Usage: Required.

Type of Response: Numeric value ≥ 0.00 and ≤ 9.99 . If unknown, enter "0" (Note: valid for data file upload or web services, not valid on [Manage Scanners](#) page. For manual entry, check the "Unknown" box).

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)**151 CT screening exam result by [Lung-RADS category](#)**

This is a quality assurance tool designed to standardize lung cancer screening CT reporting and management recommendations, reduce confusion in lung cancer screening CT interpretations and facilitate outcome monitoring. It is recommended that the CT report contain the Lung-RADS category. If the category is not specifically stated in the report, then assign a category to the LCSR registry case record. This is sufficient documentation from the registry perspective.

Usage: Required.

Type of Response: Select one:

- 0: recalls (incomplete screen)
- 1: normal, continue annual screening
- 2: benign appearance or behavior, continue annual screening
- 3: 6 month CT recommended
- 4A: 3 month CT recommended; may consider PET/CT
- 4B: Additional diagnostics and/or tissue sampling recommended
- 4X: Additional diagnostics and/or tissue sampling recommended – increased suspicion of malignancy

151.1 Reason for Recall

Usage: Required if “CT screening exam result by [Lung-RADS category](#)” (#151) = “0: recalls (incomplete screen)”, not applicable otherwise.

Type of Response: Select one:

- I: Incomplete coverage
- N: Noise
- M: Respiratory motion
- E: Expiration
- OBa: Obscured by acute abnormality
- UC: Unable to complete, please specify
- IP: Inflammatory or infectious process
- U: Unknown

151.2 Reason for recall, Unable to complete, please specify

Usage: Required if “Reason for Recall” (#151.1) = “UC: Unable to complete”; otherwise, this field is not applicable.

Type of response: Text

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)

151.3 Lung-RADS version used to report results

Usage: Required.

Type of response: Select one:

- 1.0
 - 1.1
 - Lung-RADS 2022
 - Other/unknown
-

152 NO LONGER USED**153 Other clinically significant or potentially significant abnormalities – CT exam result modifier S:**

Usage: Required. Select “Yes” if:

- Other clinically significant or potentially significant abnormalities were reported, regardless of whether the Lung-RADS assessment category includes the S modifier or not.
- It is uncertain whether an abnormality is potentially significant or not.

Type of Response: Select one:

- Yes
 - No
-

154 If yes, what were the other findings?

Usage: Optional if “Other clinically significant or potentially significant abnormalities” (#153) = “Yes”; otherwise, this field is not applicable.

Type of Response (select all that apply):

- Aortic aneurysm
 - Coronary arterial calcification moderate or severe
 - Pulmonary fibrosis
 - Mass, please specify, e.g., neck, mediastinum, liver, kidneys, other
 - Other interstitial lung disease, specify type if known
 - Emphysema, moderate or severe
 - Other clinically significant abnormalities
 - No clinically significant or potentially significant abnormalities
 - Unknown
-

155 Mass, please specify, e.g., neck, mediastinum, liver, kidneys

Usage: Required if “If yes, what were the other findings” (#154) = “Mass, specify”; otherwise, this field is not applicable.

Type of Response: Text

Exam Form: Study Data – About the Exam (Section 5A8 – 5A17)**156 Other interstitial lung disease, select type if known**

Usage: Optional if "If yes, what were the other findings" (#154) = "Other interstitial lung disease"; otherwise, this field is not applicable.

Type of Response: Select one:

- UIP/IPF
- ILD, other, please specify
- ILD, unknown

157 Other Interstitial Lung Disease, ILD, other, please specify

Usage: Required if "Other interstitial lung disease" (#156) = "ILD, other"; otherwise, this field is not applicable.

Type of Response: Text

157.1 Other clinically significant abnormalities, please specify

Usage: Required if "If yes, what were the other findings?" (#154) = "Other clinically significant abnormalities"; otherwise, this field is not applicable.

Type of Response: Text

158 Prior history of lung cancer - CT exam result modifier C

Usage: Optional

Type of Response: Select one:

- Yes
- No
- Unknown

159 Years since prior diagnosis of lung cancer (years)

Usage: Optional if Prior history of lung cancer - CT exam result modifier C (#158) = "Yes" or "Null"; not applicable otherwise.

Type of Response: Integer ≥ 1 and ≤ 99

Exam Form: Follow-Up within 1 Year (Section 5B)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

159.1 Follow-up Unique ID*

Usage: Optional; you may provide an identifier to link back to your internal follow up record.

Type of Response: Text

*Only applicable to electronic transmissions

160 Date of follow-up

Usage: Required when submitting a follow-up for a case.

Type of Response: mm/dd/yyyy format; cannot be a future date

161 Follow-up diagnostic

Usage: Required when submitting a follow-up for a case.

Type of Response: Select one:

- low dose chest CT
- routine chest CT
- PET/CT
- Bronchoscopy
- Non-surgical biopsy
- Surgical resection
- Other, please specify

162 Follow-up diagnostic - Other, please specify

Usage: Required if "Follow-up diagnostic" (#161) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: Text

Exam Form: Follow-Up within 1 Year (Section 5B)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

162.1 CT diagnostic exam result by [Lung-RADS category](#)

This is a quality assurance tool designed to standardize lung cancer screening CT reporting and management recommendations, reduce confusion in lung cancer screening CT interpretations and facilitate outcome monitoring. It is recommended that the CT report contain the Lung-RADS category. If the category is not specifically stated in the report, then assign a category to the LCSR registry case record. This is sufficient documentation from the registry perspective.

Report a diagnostic PET/CT exam, or a staging and diagnostic PET/CT exam, as follow-up diagnostic only if it was performed with adequate image thickness to be assigned a Lung-RADS category.

Usage: Required if "Follow-up diagnostic (#161) = 'low dose chest CT,' routine chest CT' or 'PET/CT'; optional if "Follow-up diagnostic (#161) = 'other, specify'; optional otherwise (Version 1.7 only).

Type of Response: Select one:

- 0: recalls (incomplete screen)
- 1: normal, continue annual screening
- 2: benign appearance or behavior, continue annual screening
- 3: 6-month CT recommended
- 4A: 3-month CT recommended; may consider PET/CT
- 4B: Additional diagnostics and/or tissue sampling recommended
- 4X: Additional diagnostics and/or tissue sampling recommended – increased suspicion of Malignancy
- 88: Lung-RADS category unknown/not reported

162.2 Reason for Diagnostic Recall

Usage: Required if "CT diagnostic exam result by [Lung-RADS category](#)" (#162.1) = "0: recalls (incomplete screen)" (Version 1.7 only), not applicable otherwise

Type of Response: Select one:

- I: Incomplete coverage
- N: Noise
- M: Respiratory motion
- E: Expiration
- OBa: Obscured by acute abnormality
- UC: Unable to complete, please specify
- IP: Inflammatory or infectious process
- U: Unknown

162.3 Reason for diagnostic recall, Unable to complete, please specify

Usage: Required if "Reason for Diagnostic Recall" (#162.2) = "UC: Unable to complete"; otherwise, this field is not applicable (Version 1.7 only).

Type of response: Text

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

163 Tissue/cytology diagnosis

Usage: Required if "Follow-up diagnostic" (#161) = "Bronchoscopy, Non-surgical biopsy, or Surgical resection". If more than one tissue/cytology diagnosis applies, report the most concerning, invasive, or aggressive from a cancer management perspective.

Optional if "Follow-up diagnostic" = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: Select one:

- Benign
- Malignant - invasive lung cancer
- Malignant - Minimally invasive lung cancer
- Malignant - Non-lung cancer
- Malignant - adenocarcinoma in situ
- Malignant, (not adenocarcinoma), lung cancer, non invasive
- Malignant, (not adenocarcinoma), lung cancer, invasive status unknown
- Premalignancy - atypical adenomatous hyperplasia
- Non-diagnostic
- Clinical – without histology
- Malignant – carcinoid
- Other, please specify
- Unknown

163.1 Tissue/cytology diagnosis, Other, Please specify

Usage: Required if "Tissue/cytology diagnosis" (#163) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: text

164 Tissue/cytology diagnosis method

Usage: Required if "Tissue/cytology diagnosis" (#163) is populated and is not "Clinical – without histology," "Other, specify" or "Unknown". If "Tissue/cytology diagnosis" (#163) is populated and is "Clinical – without histology," "Other, specify" or "Unknown", then this field is optional; otherwise, this field is not applicable.

Type of Response: Select one:

- Percutaneous (non-surgical)
- Bronchoscopic
- Surgical
- Unknown

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

165 Location from which sample was obtained

Usage: Required if "Tissue/cytology diagnosis" (#163) is populated and is not "Clinical – without histology," "Other, specify" or "Unknown". If "Tissue/cytology diagnosis" (#163) is populated and is "Clinical – without histology," "Other, specify" or "Unknown", then this field is optional; otherwise, this field is not applicable.

Type of Response: Select one:

- L hilum - Left Hilum
- Lingula - Lingula of the Lung
- LLL- Left Lower Lobe of Lung
- LUL - Left Upper Lobe of Lung
- R hilum- Right Hilum
- RLL - Right Lower Lobe of Lung
- RML - Right Middle Lobe of Lung
- RML/RLL - Right Middle and Right Lower Lobes of Lung
- RU/RM - Right Upper and Right Middle Lobes of Lung
- RUL - Right Upper Lobe of Lung
- Other, please specify
- Unknown

166 Location, other, please specify

Usage: Required if "Location from which sample was obtained" (#165) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: text

167 Histology of primary or dominant cell type

Usage: Required if "Tissue/cytology Diagnosis" (#163) = "Malignant – invasive lung cancer", "Malignant – Minimally invasive lung cancer", "Malignant – adenocarcinoma in situ", "Malignant – carcinoid", "Malignant – not adenocarcinoma, lung cancer, non-invasive", or "Malignant – not adenocarcinoma, lung cancer, invasive status unknown".

Optional if "Tissue/cytology Diagnosis" = "Malignant – Non-lung cancer",

Otherwise, this field is not applicable.

Type of Response: Select one:

- Non-small cell lung cancer
- High grade neuroendocrine tumor (small cell lung cancer)
- Low grade neuroendocrine tumor (carcinoid)
- Intermediate grade neuroendocrine tumor (Atypical carcinoid)
- Other, please specify
- Unknown

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

168 Histology of primary or dominant cell type – Non-small cell lung cancer

Usage: Required if "Histology of primary or dominant cell type" (#167) = "Non-small cell lung cancer"; otherwise, this field is not applicable.

Type of Response: Select one:

- Invasive adenocarcinoma
- Squamous cell carcinoma
- Adenosquamous cell carcinoma
- Undifferentiated or poorly differentiated carcinoma
- Large cell carcinoma
- Other, please specify

169 Other Non-small cell lung cancer histology, primary cell type, please specify

Usage: Required if "Histology of primary or dominant cell type – Non-small cell lung cancer" (#168) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: Text

169.01 Other histology of primary or dominant cell type, please specify

Usage: Required if "Histology of primary or dominant cell type" (#167) = "Other, please specify"; otherwise, this field is not applicable (Version 1.7 only).

Type of Response: Text

169.1 Histology of secondary cell type

Usage: Optional if "Histology of primary or dominant cell type" (#167) = "Non-small cell lung cancer", "High grade neuroendocrine tumor (small cell lung cancer)", "Low grade neuroendocrine tumor (carcinoid)" or "Intermediate grade neuroendocrine tumor (Atypical carcinoid)"; otherwise this field is not applicable.

Type of Response: Select one:

- Non-small cell lung cancer
- High grade neuroendocrine tumor (small cell lung cancer)
- Low grade neuroendocrine tumor (carcinoid)
- Intermediate grade neuroendocrine tumor (Atypical carcinoid)
- Other, please specify
- Unknown

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

169.2 Histology of secondary cell type - Non-small cell lung cancer

Usage: Required if "Histology of secondary cell type" (#169.1) = "Non-small cell lung cancer"; otherwise, this field is not applicable.

Type of Response: Select one:

- Invasive adenocarcinoma
- Squamous cell carcinoma
- Adenosquamous cell carcinoma
- Undifferentiated or poorly differentiated carcinoma
- Large cell carcinoma
- Other, please specify

169.3 Other Non-small cell lung cancer histology, secondary cell type, please specify

Usage: Required if "Histology of secondary cell type – Non-small cell lung cancer" (#169.2) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: Text

169.4 Other histology of secondary cell type, please specify

Usage: Required if "Histology of secondary cell type" (#169.1) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: Text

170 Stage - Clinical or pathologic?

Usage: Required if "Tissue/cytology Diagnosis" (#163) = "Malignant – invasive lung cancer", "Malignant – Minimally invasive lung cancer", "Malignant – adenocarcinoma in situ", "Malignant – carcinoid", "Malignant – not adenocarcinoma, lung cancer, non-invasive", or "Malignant – not adenocarcinoma, lung cancer, invasive status unknown".

Optional if "Tissue/cytology Diagnosis" = "Malignant – Non-lung cancer", "Non-diagnostic", or "Clinical – without histology", or if "Follow-up diagnostic (#161)" = "PET/CT". If "Tissue/cytology Diagnosis" = "Clinical – without histology", then this field must be "Clinical" or null.

Otherwise, this field is not applicable.

Type of Response: Select one:

- Clinical
- Pathologic
- Unknown

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

171 Overall stage

Usage: Required if "Tissue/cytology Diagnosis" (#163) = "Malignant – invasive lung cancer", "Malignant – Minimally invasive lung cancer", "Malignant – adenocarcinoma in situ", "Malignant – carcinoid", "Malignant – not adenocarcinoma, lung cancer, non-invasive", or "Malignant – not adenocarcinoma, lung cancer, invasive status unknown".

Optional if "Tissue/cytology Diagnosis" = "Malignant – Non-lung cancer", "Non-diagnostic", or "Clinical – without histology", or if "Follow-up diagnostic (#161)" = "PET/CT".

Otherwise, this field is not applicable.

Type of Response: Select one:

- 0
- IA
- IA1
- IA2
- IA3
- IB
- IIA
- IIB
- IIIA
- IIIB
- IIIC
- IV
- IVA
- IVB
- Unknown

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

172 T Status

As defined by the [AJCC Cancer Staging Manual](#). Report pathologic if procedure is surgical resection, clinical otherwise.

Usage: Optional if "Tissue/cytology Diagnosis" (#163) is populated or if "Follow-up diagnostic (#161)" = "PET/CT"; otherwise, this field is not applicable.

Type of Response: Select one:

- TX
- T0
- T1a
- T1b
- T1c
- T1mi
- T2a
- T2b
- T3
- T4
- Tis
- unknown

173 N Status

As defined by the [AJCC Cancer Staging Manual](#). Report pathologic if procedure is surgical resection, clinical otherwise.

Usage: Optional if "Tissue/cytology Diagnosis" (#163) is populated or if "Follow-up diagnostic (#161)" = "PET/CT"; otherwise, this field is not applicable.

Type of Response: Select one:

- NX
- N0
- N1
- N2
- N3

Exam Form: Follow-Up: Lung Cancer Incidence (Section 5B3 – 5B11)

The following fields need to be collected for any follow up imaging, biopsy, or surgical procedure for a patient who is in the screening program. There can be multiple follow up records for each patient during the same year. Please complete a follow up record for each procedure, even if the procedures occur on the same day. For example, if a patient has a percutaneous (non-surgical) biopsy and a bronchoscopy, there should be a record for each of these.

174 M Status

As defined by the [AJCC Cancer Staging Manual](#). Report pathologic if procedure is surgical resection, clinical otherwise.

Usage: Optional if "Tissue/cytology Diagnosis" (#163) is populated or if "Follow-up diagnostic (#161)" = "PET/CT"; otherwise, this field is not applicable.

Type of Response: Select one:

- MX
- M0
- M1a
- M1b
- M1c

175 AJCC Cancer Staging Manual edition used for staging

Usage: Optional if at least one of "T Status" (#172), "N Status" (#173) or "M Status" (#174) is populated; otherwise, this field is not applicable.

Type of Response: Select one:

- 7th Edition
- 8th Edition
- Other/Unknown

Exam Form: Additional Risk Factors (Section 5C)

The following fields are required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age OR "Number of packs-year of smoking" (#125) is less than 20 OR "Number of years since Quit" (#126) is more than 15.

176 NO LONGER USED**177 NO LONGER USED****178 Radon exposure - documented high exposure levels**

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age
 OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'
 OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999
 OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select one:

- Yes
- No
- Unknown

179 Occupational exposures to agents that are identified as carcinogens targeting the lungs

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age
 OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'
 OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999
 OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select all that apply:

- Silica
- Cadmium
- Asbestos
- Arsenic
- Beryllium
- Chromium
- Diesel fumes
- Nickel
- Coal smoke
- Soot
- Other, specify
- Unknown
- None

Exam Form: Additional Risk Factors (Section 5C)

The following fields are required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age OR "Number of packs-year of smoking" (#125) is less than 20 OR "Number of years since Quit" (#126) is more than 15.

179.1 Occupational exposures to agents that are identified specifically as carcinogens targeting the lungs – Other

Usage: Required if "Occupational exposures to agents that are identified specifically as carcinogens targeting the lungs" (#179) = "Other, please specify"; otherwise, this field is not applicable.

Type of Response: text

179.2 History of cancers that are associated with an increased risk of developing a new primary lung cancer

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age
 OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'
 OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999
 OR "Number of years since Quit" (#126) is more than 15.

If the patient has a history of breast cancer, or if you are unsure whether a specific cancer type is associated with an increased risk of lung cancer, please enter "other smoking-related cancers, specify" and indicate the cancer type.

Type of Response: Select all that apply:

- Prior history of lung cancer
- Lymphoma
- Head and neck cancer
- Bladder cancer
- Other smoking related cancers, please specify
- Acute myeloid leukemia
- Colorectal cancer
- Esophageal cancer
- Liver cancer
- Gastric cancer
- Kidney cancer
- Pancreatic cancer
- No history of cancers associated with an increased risk of lung cancer
- Unknown whether there is a history of cancers associated with an increased risk of a new primary lung cancer

180 History of cancers that are associated with an increased risk of developing a new primary lung cancer - other smoking-related cancers, please specify

Usage: Required if "History of cancers that are associated..." = "other smoking-related cancers, please specify"; otherwise, this field should be left blank.

Type of Response: Text

Exam Form: Additional Risk Factors (Section 5C)

The following fields are required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age OR "Number of packs-year of smoking" (#125) is less than 20 OR "Number of years since Quit" (#126) is more than 15.

181 Lung cancer in first-degree relative (mother, father, sister, brother, daughter, or son with history of lung cancer)

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age

OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'

OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999

OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select one:

- Yes
- No
- Not sure/unknown

182 Family history of lung cancer, other than first-degree relative

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age

OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'

OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999

OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select one:

- Yes
- No
- Not sure/unknown

183 COPD

Has the patient been told by a medical health care professional that he or she has COPD (chronic obstructive pulmonary disease), emphysema, or smoking-related chronic bronchitis?

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age

OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'

OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999

OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select one:

- Yes
- No
- Unknown

Exam Form: Additional Risk Factors (Section 5C)

The following fields are required if "Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age OR "Number of packs-year of smoking" (#125) is less than 20 OR "Number of years since Quit" (#126) is more than 15.

184 Pulmonary fibrosis

Has the patient been told by a health care professional that he or she has any form of interstitial lung fibrosis, or scarring of the lung?

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age

OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'

OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999

OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select one:

- Yes
- No
- Unknown

185 Secondhand smoke exposure

Usage: Optional. Required if:

"Examination Date" (#121) less "Patient's Date of Birth" (#114) is greater than 80 years of age or less than 50 years of age

OR "Smoking Status" (#124) is 'Never Smoker' or 'Unknown if ever smoked'

OR "Number of packs-year of smoking" (#125) is less than 20 or ≥ 999

OR "Number of years since Quit" (#126) is more than 15.

Type of Response: Select one:

- Yes
- No
- Not sure/unknown

Glossary

Glossary

ACR	American College of Radiology
CT	Computed Tomography
CTDI_{vol}	Volume CT dose index
Lbs	Pounds
LCSR	Lung Cancer Screening Registry
mGy	milligray
N/A	Not applicable
NRDR	National Radiology Data Registry
SSN	Social Security Number
RDSR	Radiation Dose Structured Report