### National Lung Screening Trial / Lung Screening Study (NLST/LSS)

#### CHEST X-RAY SCREENING EXAMINATION FORM (XRY)

**Administrative Section**

<table>
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<tr>
<th>Screening Center ID:</th>
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Date of Examination:  

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
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Study Year (T0 - T2):  

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Visit Number:  

<table>
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<tr>
<th>One</th>
<th>Two</th>
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Reason for repeat visit  

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**Interval Follow Up Information:**

Has the participant had any imaging studies since the previous screening exam that may be useful for the radiologist to review if needed?  

- [ ] Yes  
- [ ] No  
- [ ] N/A  

If YES, dates obtained (Month /Year):  

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
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**PART A. CHEST X-RAY EXAMINATION FINDINGS (COMPLETED BY TECHNOLOGIST)**

1. **Number of Attempts:**

- [ ] None (GO TO A.3)  
- [ ] One  
- [ ] Two  
- [ ] Three

2. **Adequate Image Obtained:**

- [ ] No (GO TO A.4)  
- [ ] Yes

3. **Reason for Inadequate or No Image:**

   (MARK ALL THAT APPLY)

- Participant refusal  
- Equipment malfunction  
- Poor film quality  
- Other (SPECIFY)  

   __________________________

4. **Technical Parameters:**

   A. [ ] _________ kVp  
   B. [ ] _________ mAs  
   C. [ ] _________ mA  
   D. [ ] _________ Time (msec)  
   E. [ ] _________ Exposure Value

5. **CXR system used:**

- [ ] Screen-Film (SF)  
  [ ] Machine Number
- [ ] Computed Radiography (CR)  
  [ ] Machine Number
- [ ] Direct Digital Radiography (DR)  
  [ ] Machine Number

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6. **Comments:**  

- [ ] No  
- [ ] Yes

   __________________________

7. **Tech ID:**  

|  |  |  |  |  |

**Signature:**  

______________________________

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Initials Complete: ________  

Initials QC: ________

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### PART B. CHEST X-RAY OVERALL DIAGNOSTIC QUALITY (COMPLETED BY RADIOLOGIST)

1. Indicate the overall diagnostic quality of CXR:
   - [ ] A. Diagnostic CXR (GO TO C.1)
   - [ ] B. Limited CXR, but interpretable (COMPLETE B.2 AND GO TO C.1)
   - [ ] C. Non-diagnostic CXR, reschedule CXR (COMPLETE B.2 AND GO TO D.1)
   - [ ] D. No image available (GO TO D.3, COMMENTS)

2. Which of the following affected the quality of the limited or non-diagnostic CXR? (MARK ALL THAT APPLY)
   - [ ] Low lung volumes
   - [ ] Lungs incompletely imaged
   - [ ] Poor positioning
   - [ ] Motion degradation
   - [ ] Incorrect exposure or other technical parameter
   - [ ] Artifacts obscure anatomy
   - [ ] Incorrect processing algorithm
   - [ ] High image noise
   - [ ] Other (SPECIFY) ________________________________________

### PART C. CHEST X-RAY EXAMINATION FINDINGS (COMPLETED BY RADIOLOGIST)

1. Radiologic Abnormality Noted:
   - [ ] No (GO TO D.1 AND MARK RESULT "E")
   - [ ] Yes (COMPLETE C.2. RECORD INFORMATION FOR EACH ABNORMALITY)

2. Record Information for Each Abnormality:

<table>
<thead>
<tr>
<th>Abn #</th>
<th>Description of Abnormality</th>
<th>Complete for Code 51 Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Non-calcified visible nodule/mass (MUST MARK &quot;A&quot; IN D.1)</td>
<td>Location of Epicenter</td>
</tr>
<tr>
<td>53</td>
<td>Benign lung nodule(s) (benign calcification)</td>
<td>Nodule/mass dimensions</td>
</tr>
<tr>
<td>54</td>
<td>Atelectasis, segmental or greater</td>
<td>Nodule Mass Margins</td>
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<tr>
<td>55</td>
<td>Pleural thickening or effusion</td>
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<tr>
<td>56</td>
<td>Non-calcified hilar/mediastinal adenopathy/mass ≥ 10 mm short axis</td>
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<tr>
<td>57</td>
<td>Chest wall abnormality (e.g. bone destruction, metastasis)</td>
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<tr>
<td>58</td>
<td>Consolidation</td>
<td></td>
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<tr>
<td>59</td>
<td>Reticular/reticulonodular opacities, honeycombing, fibrosis, scar</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>6 or more nodules, not suspicious for cancer (opacities ≥ 4mm)</td>
<td>(ANY SUSPICIOUS NODULES MUST BE CODED AS 51)</td>
</tr>
<tr>
<td>63</td>
<td>Emphysema</td>
<td>Location of Epicenter</td>
</tr>
<tr>
<td>64</td>
<td>Significant cardiovascular abnormality (SPECIFY)</td>
<td>Nodule/mass dimensions</td>
</tr>
<tr>
<td>70</td>
<td>Other significant abnormality above the diaphragm (SPECIFY)</td>
<td>Nodule/ Mass Margins</td>
</tr>
<tr>
<td>71</td>
<td>Other significant abnormality at/below the diaphragm (SPECIFY)</td>
<td></td>
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<tr>
<td>72</td>
<td>Other minor abnormality noted (SPECIFY IF DESIRED)</td>
<td></td>
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CHECK BOX IF IDENTIFIED AFTER COMPARISON WITH HISTORICAL IMAGES:

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### PART D. CHEST X-RAY INTERPRETATION RESULTS (COMPLETED BY RADIOLOGIST)

1. Lung Screening Result:
   - [ ] A. Positive Screen – Abnormalities suspicious for lung cancer
   - [ ] B. Negative Screen – Clinically significant abnormalities not suspicious for lung cancer (GO TO D.3)
   - [ ] C. Negative Screen – Minor abnormalities not suspicious for lung cancer (GO TO D.3)
   - [ ] D. Negative Screen – No significant abnormalities (GO TO D.3)
   - [ ] E. Inadequate (COMPLETE PART D.3 AND GO TO E.6)

2. Other Significant Abnormalities (in addition to lung screening results) that need to be reported:
   - [ ] No
   - [ ] Yes (SPECIFY IN D.3)

3. Comments: [ ] No  [ ] Yes

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### PART E. CHEST X-RAY COMPARISON RESULTS – COMPLETE FOR ALL LUNG SCREENING RESULTS (COMPLETED BY RADIOLOGIST)

1. Comparison Image: (MARK ALL THAT APPLY)
   - [ ] No image available (GO TO E.4)
   - [ ] T0
   - [ ] T1
   - [ ] T2 Inadequate scan
   - [ ] Previous scan not completed as part of NLST (RECORD SCAN TYPE AND DATES FOR UP TO 3 PREVIOUS SCANS)

<table>
<thead>
<tr>
<th>Scan Types</th>
<th>Previous Scan Type(s):</th>
<th>Date(s) of Previous Scan(s) (MONTH/DAY/YEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = CT</td>
<td></td>
<td></td>
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<tr>
<td>2 = CXR</td>
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<tr>
<td>3 = MRI</td>
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</tbody>
</table>

2. Enter abnormality number and code for all Code 51 abnormalities AND other significant abnormalities seen on this screening exam. (IF NONE, GO TO E.3)

<table>
<thead>
<tr>
<th>Abn. # (FROM PART C.2)</th>
<th>Abn.Code (FROM PART C.2)</th>
<th>Was Abnormality Pre-existing?</th>
<th>Earliest Date Visible (COMPLETE ONLY FOR PRE-EXISTING ABNORMALITIES)</th>
<th>COMPLETE FOR CODE 51 ABNORMALITIES ONLY</th>
<th>COMPLETE FOR OTHER SIGNIFICANT ABNORMALITIES ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 = No</td>
<td>(Month/Day/Year)</td>
<td>Interval Growth of Abnormality?</td>
<td>Interval suspicious change in attenuation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Yes</td>
<td></td>
<td>1 = No</td>
<td>1 = No</td>
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<td>9 = Unable to determine</td>
<td></td>
<td>2 = Yes</td>
<td>2 = Yes</td>
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<tr>
<td></td>
<td></td>
<td>99/99/9999 = Unable to determine</td>
<td></td>
<td>9 = Unable to determine</td>
<td>9 = Unable to determine</td>
</tr>
</tbody>
</table>

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### 3a. Lung Screening Comparison Result:

- **A. Positive Screen** – Abnormalities suspicious for lung cancer
- **B. Positive Screen** – Abnormalities suspicious for lung cancer, no significant change
- **C. Negative Screen** – Clinically significant abnormalities not suspicious for lung cancer (GO TO E.4)
- **D. Negative Screen** – Minor abnormalities not suspicious for lung cancer (GO TO E.4)
- **E. Negative Screen** – No significant abnormalities (GO TO E.4)

### 3b. Other Significant Abnormalities (in addition to lung screening results) that need to be reported:

- [ ] No
- [ ] Yes (SPECIFY IN E.5)

### 4. Which of the following diagnostic procedures for screening examination results should the screening result letter include? (MARK ALL THAT APPLY)

- No diagnostic intervention necessary
- Comparison with historical images (NOTE: CHECK OTHER PROCEDURES IN CASE HISTORICAL IMAGES UNAVAILABLE)
- Chest X-ray, with or without additional views to confirm abnormality and location
- Chest fluoroscopy to confirm abnormality and location
- Low kVp chest X-ray to determine abnormality calcification
- Chest X-ray in 3 months

- Low dose CT with NLST parameters:
  - (MARK AN AREA OF FOCUS)
    - Limited
    - Entire chest
- Diagnostic CT
- FDG-PET
- Tech 99m depreotide scintigraphy
- Biopsy (percutaneous, thoracoscopic, open, etc.)
- Other (SPECIFY)____________________________________

### 5. Comments:  

- [ ] No
- [ ] Yes

________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________

[ ] Continued

### 6. Radiologist ID: _______   _______   _______   _______

Date: _______ / _______ / _______  

MO DAY YEAR

Signature

____________________________________________________________________________________________________