### Variant 1: Neonate younger than 1 month of age with fever without source (FWS) and no respiratory symptoms.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography chest</td>
<td>May be appropriate</td>
<td>☢ &lt;0.1 mSv</td>
<td>☢ &lt;0.03 mSv</td>
<td>5 n/a</td>
<td></td>
<td></td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

### Variant 2: Neonate younger than 1 month of age with FWS and respiratory symptoms.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography chest</td>
<td>Usually appropriate</td>
<td>☢ &lt;0.1 mSv</td>
<td>☢ &lt;0.03 mSv</td>
<td>8 n/a</td>
<td></td>
<td></td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

### Variant 3: Infant or child age 1 month to 36 months with FWS with low risk for occult pneumonia (No respiratory signs or symptoms, fever<39° or leukocytosis<20,000/mm3).

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography chest</td>
<td>Usually not appropriate</td>
<td>☢ &lt;0.1 mSv</td>
<td>☢ &lt;0.03 mSv</td>
<td>2 n/a</td>
<td></td>
<td></td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>
Variant 4: Infant or child age 1 to 36 months with FWS with any of the following; respiratory signs or symptoms, fever 39° centigrade or white blood cell (WBC) count 20,000/mm3.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography chest</td>
<td></td>
<td></td>
<td>☢ &lt;0.1 mSv</td>
<td>☢ &lt;0.03 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
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</tr>
</tbody>
</table>

Variant 5: Child with FWS and neutropenia.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography chest</td>
<td>May be appropriate</td>
<td>☢ &lt;0.1 mSv</td>
<td>☢ &lt;0.03 mSv [ped]</td>
<td>5</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>CT chest without IV contrast</td>
<td>May be appropriate</td>
<td>☢☢ 1-10 mSv</td>
<td>☢☢ 3-10 mSv [ped]</td>
<td>5</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>CT chest without and with IV contrast</td>
<td>Usually not appropriate</td>
<td>☢☢ 1-10 mSv</td>
<td>☢☢ 3-10 mSv [ped]</td>
<td>1</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>CT chest with IV contrast</td>
<td>May be appropriate</td>
<td>☢☢ 1-10 mSv</td>
<td>☢☢ 3-10 mSv [ped]</td>
<td>6</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>CT abdomen without IV contrast</td>
<td>Usually not appropriate</td>
<td>☢☢ 1-10 mSv</td>
<td>☢☢ 3-10 mSv [ped]</td>
<td>2</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
<tr>
<td>CT abdomen without and with IV contrast</td>
<td>Usually not appropriate</td>
<td>☢☢☢ 10-30 mSv</td>
<td>☢☢☢ 10-30 mSv [ped]</td>
<td>1</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
</tr>
</tbody>
</table>
### CT abdomen with IV contrast
- **May be appropriate**
  - ▶️ 0.1-1 mSv
  - ▶️ 0.3-3 mSv [ped]
- **Rating:** 4
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT paranasal sinuses without IV contrast
- **May be appropriate**
  - ▶️ 0.1-1 mSv
  - ▶️ 0.3-3 mSv [ped]
- **Rating:** 4
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT paranasal sinuses without and with IV contrast
- **Usually not appropriate**
  - ▶️ 1-10 mSv
  - ▶️ 0.3-3 mSv [ped]
- **Rating:** 1
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT paranasal sinuses with IV contrast
- **May be appropriate**
  - ▶️ 0.1-1 mSv
  - ▶️ 0.3-3 mSv [ped]
- **Rating:** 4
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### Radiography chest
- **Usually appropriate**
  - ▶️ <0.1 mSv
  - ▶️ <0.03 mSv [ped]
- **Rating:** 7
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT chest without IV contrast
- **May be appropriate**
  - ▶️ 1-10 mSv
  - ▶️ 3-10 mSv [ped]
- **Rating:** 4
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT chest without and with IV contrast
- **Usually not appropriate**
  - ▶️ 1-10 mSv
  - ▶️ 3-10 mSv [ped]
- **Rating:** 1
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT chest with IV contrast
- **May be appropriate**
  - ▶️ 1-10 mSv
  - ▶️ 3-10 mSv [ped]
- **Rating:** 5
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT abdomen without IV contrast
- **Usually not appropriate**
  - ▶️ 1-10 mSv
  - ▶️ 3-10 mSv [ped]
- **Rating:** 2
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

### CT abdomen without and with IV contrast
- **Usually not appropriate**
  - ▶️ 10-30 mSv
  - ▶️ 10-30 mSv [ped]
- **Rating:** 1
- **Median:** n/a
- **Final Tabulations:** 0 0 0 0 0 0 0 0 0

---

**Variant 6:** Infant or child more than 1-month of age with fever of unknown origin (FUO).
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness</th>
<th>Dose (mSv)</th>
<th>[ped] Dose (mSv)</th>
<th>Risk Level</th>
<th>Risk Level</th>
<th>Dose (mSv)</th>
<th>Risk Level</th>
<th>Dose (mSv)</th>
<th>Risk Level</th>
<th>Dose (mSv)</th>
<th>Risk Level</th>
<th>Dose (mSv)</th>
<th>Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT abdomen with IV contrast</td>
<td>May be appropriate</td>
<td>1-10</td>
<td>3-10</td>
<td>4</td>
<td>n/a</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT paranasal sinuses without IV contrast</td>
<td>May be appropriate</td>
<td>0.1-1mSv</td>
<td>0.3-3 mSv</td>
<td>4</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT paranasal sinuses without and with IV contrast</td>
<td>Usually not appropriate</td>
<td>1-10</td>
<td>3-10</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>CT paranasal sinuses with IV contrast</td>
<td>Usually not appropriate</td>
<td>0.1-1mSv</td>
<td>0.3-3 mSv</td>
<td>3</td>
<td>n/a</td>
<td>0</td>
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</tr>
<tr>
<td>US abdomen</td>
<td>May be appropriate</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>n/a</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRI whole body without IV contrast</td>
<td>Usually not appropriate</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRI whole body without and with IV contrast</td>
<td>Usually not appropriate</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FDG-PET/CT skull base to mid-thigh</td>
<td>May be appropriate</td>
<td>10-30 mSv</td>
<td>10-30 mSv</td>
<td>4</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Appendix Key
A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

**Appropriateness Category**: The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

**SOE**: Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- **References**: The citation number and PMID for the reference(s) associated with the recommendation.
- **Study Quality**: The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

**RRL**: Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

**Rating**: The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Median**: The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Final tabulations**: A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at [www.acr.org/ac](http://www.acr.org/ac).