# American College of Radiology
## ACR Appropriateness Criteria®
### Acute Hand and Wrist Trauma

**Variant 1:**  Acute blunt or penetrating trauma to the hand or wrist. Initial imaging.

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| CT area of interest with IV contrast | Usually not appropriate | Expert Consensus | Varies | Varies | 1 | 1 | 12 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |

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| CT area of interest without IV contrast | Usually not appropriate | Varies | Varies | 1 | 1 | 12 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

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<p>| CT area of interest without and with IV contrast | Usually not appropriate | Expert Consensus | Varies | Varies | 1 | 1 | 12 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |</p>
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**Variant 2:** Suspect acute hand or wrist trauma. Initial radiographs negative or equivocal. Next imaging study.

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Variant 3: Acute wrist fracture on radiographs. Suspect wrist tendon or ligament trauma. Next imaging study.

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### CT wrist with IV contrast
- **Usually not appropriate**
- **Expert Consensus**
- **☢ <0.1 mSv**

### CT wrist without IV contrast
- **Usually not appropriate**
- **Expert Consensus**
- **☢ <0.1 mSv**

### CT wrist without and with IV contrast
- **Usually not appropriate**
- **Expert Consensus**
- **☢ <0.1 mSv**

### CT wrist without IV contrast (bilateral)
- **Limited**
- **☢ <0.1 mSv**

### MRI wrist without and with IV contrast
- **Usually not appropriate**
- **Expert Consensus**
- **☢ 0 mSv**

### Bone scan wrist
- **Usually not appropriate**
- **Expert Consensus**
- **☢☢☢ 1-10 mSv**

### MR arthrography wrist
- **Limited**
- **☢ 0 mSv**

### Variant 4: Initial radiographs showing distal radioulnar joint or carpal malalignment in the absence of fracture. Next imaging study.
## Variant 5:  Acute hand fracture on radiographs. Suspect hand tendon or ligament trauma. Next imaging study.

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**Variant 6:** Initial radiographs showing metacarpophalangeal, proximal interphalangeal, or distal interphalangeal joint malalignment in the absence of fracture. Next imaging study.

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<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>
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<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
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<td>[ped]</td>
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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).