### Musculoskeletal imaging recommendations for MPS disorders

<table>
<thead>
<tr>
<th>Imaging study</th>
<th>Initial assessment</th>
<th>Yearly</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cervical spine</strong></td>
<td></td>
<td></td>
<td>Follow neurological exam yearly, with repeat radiographs every 3–5 years.</td>
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<tr>
<td>Flexion/extension lateral radiographs</td>
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<tr>
<td>MRI</td>
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<tr>
<td><strong>Thoracolumbar spine</strong></td>
<td></td>
<td>✔</td>
<td>Exams are less frequent as growth slows.</td>
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<td></td>
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<td>Further exams warranted only with change in neurological exam.</td>
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<td>Primarily warranted for preoperative evaluation.</td>
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<tr>
<td>AP/lateral 36-inch cassette radiographs</td>
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<tr>
<td>MRI</td>
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<tr>
<td>CT scan</td>
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<tr>
<td><strong>Hips/pelvis</strong></td>
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<tr>
<td>AP pelvis</td>
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<tr>
<td><strong>Lower extremities</strong></td>
<td></td>
<td>✔</td>
<td>Further exams warranted based on clinical exam.</td>
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<tr>
<td>Standing AP radiographs</td>
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<tr>
<td><strong>Skeletal survey</strong></td>
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<tr>
<td>AP/lateral skull</td>
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<tr>
<td>AP/lateral spine</td>
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<tr>
<td>AP pelvis</td>
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<tr>
<td>AP forearms</td>
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<tr>
<td>AP hands</td>
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<tr>
<td>AP feet</td>
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<tr>
<td>Lateral cervical spine</td>
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</tbody>
</table>

Adapted from White, *Rheumatology*, 2011.

Abbreviations: AP, anteroposterior; CT, computed tomography; MPS, mucopolysaccharidoses; MRI, magnetic resonance imaging.