ENCOUNTERS WITH FLUOROSCOPY SYSTEMS

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DISCLOSURES

I have none.
CASE STUDIES

• Maximum AKR measurements in fluoroscopy
• Measuring HVL for mini c-arms
• Challenges with evaluating image uniformity
If the source is below the table:
Measure maximum AKR at 1cm above the table

21CFR (1020.32)
21CFR (1020.32)

Minimum table height + Minimum SID

Maximum measured AKR:
\(~ 9.3 \text{ R/min (82 mGy/min)}\)

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21CFR (1020.32)

Minimum table height + Increased SID

Maximum measured AKR:
\(~ 15 \text{ R/min (132 mGy/min)}\)
21 CFR (1020.32)

If the source is **below the table:**
Measure maximum AKR at **1cm above the table**

<table>
<thead>
<tr>
<th>SID</th>
<th>Measured AKR</th>
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<tbody>
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For a c-arm fluoroscope:
Measure maximum AKR at 30cm from the detector

<table>
<thead>
<tr>
<th>SID</th>
<th>Measured AKR</th>
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**The More You Know!**

*DETERMINE HOW THE FLUOROSCOPY SYSTEM IS CLASSIFIED BY THE IEC/FD*
MINI C-ARMS & HVL

Max output:

0.1 mAs
75 kVp

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Minimum Required HVL

- Max output: 0.16 mAs
- 75 kVp

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recommended measurement point

FOV: ~ 2cm
GOOD LUCK.
HAVE SOME ALUMINUM SHEETS ON HAND.

IMAGE UNIFORMITY
"laser aimer"
Flat field image  Clinical images

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RADIOGRAPHY

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The More You Know!

Determine clinical relevance of artifacts.
THANK YOU!