

## INTRAVENOUS IODINATED CT CONTRAST GUIDELINES

CURRENT GFR IS RECOMMENDED FOR THE FOLLOWING OUTPATIENTS/ED PATIENTS (within 90 days)

CURRENT GFR IS RECOMMENDED FOR ALL INPATIENTS and ED patients (within 72 hours)

- Age >60 years
- History of kidney disease (renal insufficiency, dialysis, transplant, solitary kidney, renal surgery, renal neoplasm)
- History of Diabetes
- History of Hypertension requiring medical therapy
- History of Multiple Myeloma
- History of Proteinuria

GFR (mL/min)	ACTION
>/=60	IV contrast may be administered
45 to 59	IV contrast may be administered <ul style="list-style-type: none"> <li>• Reduced contrast dose and hydration are suggested</li> <li>• Discontinuation of NSAIDs, Angiotensin Receptor Antagonists, ACE Inhibitors, Diuretics (24 hours prior to procedure) is suggested</li> <li>• Nephrology should be consulted by ordering provider for any repeat contrast exam (within 48 hours of initial contrast dose)</li> </ul>
30 to 44	IV contrast may be administered in specific cases when requested by referring MD <ul style="list-style-type: none"> <li>• Reduced contrast dose and hydration are suggested</li> <li>• The technologist should contact the covering radiologist if there is a question</li> <li>• Discontinuation of NSAIDs, Angiotensin Receptor Antagonists, ACE Inhibitors, Diuretics (24 hours prior to procedure) is suggested</li> <li>• Nephrology should be consulted by ordering provider for any repeat contrast exam (within 48 hours of initial contrast dose)</li> </ul>
Below 30	An alternative exam should be considered. In cases of necessity (eg, r/o dissection, PE), IV contrast may be administered if there is no acceptable alternative. <i>These cases must be approved by the radiologist.</i> <ul style="list-style-type: none"> <li>• Reduced contrast dose</li> <li>• Hydration is recommended</li> <li>• Avoid volume depletion</li> <li>• Avoid repeat contrast administration</li> <li>• Nephrology should be consulted for any repeat exam(s)</li> <li>• Temporarily discontinue NSAIDs, Angiotensin Receptor Antagonists, ACE Inhibitors, Diuretics (24 hours prior to procedure)</li> <li>• Follow-up Cr/GFR 24, 48, and 72 hours post-exam</li> </ul>

**\*If there is an element of acute renal insufficiency, IV contrast should be avoided as GFR may be unreliable.**

Hydration recommendations:

- Outpatients should hydrate orally and avoid dehydration
- Inpatients should be hydrated with IV fluids at the direction of the referring healthcare provider.
  - Potential options:
    - Normal saline 1 mL/kg/hour 6 to 12 hours before and after exam
    - Half normal saline 1 mL/kg/hour 6 to 12 hours before after exam
    - D5W 1000 mL with 200 mEq sodium bicarb, total volume 1250 mL. Infuse bolus 3 mL/kg/hr for 1 hour precontrast. Reduce rate to 1 mL/kg/hr for 6 hours after contrast.

Reduced Contrast Dose Guidelines

- If the full dose is 125 mL, give 90 mL.
- If the full dose is 100 mL, give 75 mL.
- If the full dose is 80 mL, give 60 mL.

Follow up Renal Function Test recommendations:

- Serum Cr/GFR 24 hours, 48 hours, and 72 hours post-contrast in patients with GFR less than 45 receiving IV contrast

Medications to hold 24 hours pre-exam in patients with GFR less than 60 mL/min, when possible

- NSAIDS
- Angiotensin Receptor Antagonists
- ACE inhibitors
- Diuretics