

CT CONTRAST GFR GUIDELINES

GENERAL GUIDELINES/COMMENTS

- Contrast-associated acute kidney injury (CA-AKI) is a general term used to describe a sudden deterioration in renal function that occurs within 48 hours following the intravascular administration of iodinated contrast. CA-AKI may occur regardless of whether or not the contrast was the cause of the deterioration.
- Contrast-induced acute kidney injury (CI-AKI) (formerly known as contrast-induced nephropathy) is a specific term used to describe a sudden deterioration in renal function that is caused by the intravascular administration of iodinated contrast.
- It is the position of ACR Committee on Drugs and Contrast Media that CI-AKI is a real, albeit rare, entity.
- There is very little evidence that IV iodinated contrast is an independent risk factor for AKI in patients with GFR ≥ 30 mL/min.
- There is no evidence of a dose-toxicity relationship following IV iodinated contrast when administered at usual diagnostic doses.
- Use the 2021 CKD-EPI equation when calculating a GFR from an iStat device. See website https://www.kidney.org/professionals/KDOQI/gfr_calculator. Be sure to click on the pediatric version for patients less than 18 years of age.

OUTPATIENTS

- The following outpatients require a documented GFR within 30 days (obtained either via a creatinine level, via an iStat device or based on an outside lab report):
 - History of renal disease – current or prior AKI, current CKD, current or prior dialysis, albuminuria, solitary kidney or prior kidney surgery (total or partial nephrectomy, transplant, tumor ablation, ureteral stent or nephrostomy tube placement).
 - History of diabetes mellitus (whether or not requiring medication).
 - Treatment with metformin-containing medications.

INPATIENTS & ER PATIENTS

- All inpatients and ER patients require a documented GFR within 24 hours.
- Use of IV contrast for evaluation of truly life-threatening conditions does not require a GFR or approval by a radiologist.

GFR GUIDELINES

GFR

≥30 mL/min	Administer IV contrast <u>without</u> consulting a radiologist.
<30 mL/min ON dialysis	Administer IV contrast <u>without</u> consulting a radiologist. The timing of the next dialysis does not matter.
<30 mL/min NOT ON dialysis	Administer IV contrast <u>only after approval</u> of a radiologist. Hydration protocol may be indicated.
AKI Regardless of GFR	Administer IV contrast <u>only after approval</u> of a radiologist.

- Use of IV contrast for evaluation of truly life-threatening conditions/emergencies does not require a GFR or approval by a radiologist.