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## **Guidelines for Reporting Critical Radiology Results/Findings**

**Admin Approval:**  
**Next Review: 2/2022**

**Division/Champion:** General/Thoburn

**Subject:** Radiology Critical Results Reporting and Critical Diagnostic Tests

**Purpose:** To improve communication and patient safety and reduce medical errors by establishing a consistent mechanism for defining, documenting and reading back critical test results and for reporting the results to the appropriate care providers in a timely manner.

**Policy:**  
DEFINITION:

- A. Critical Diagnostic Test Results – Include the results of all diagnostic imaging that must be communicated immediately to the ordering physician or appropriate health care provider. (See Appendix A for defined radiology test results)
  1. **Acuity Level 4 Results** – Are findings that could result in mortality or significant or unnecessary morbidity if not appropriately handled, **requiring direct communication** for clinical decision within 3 hours perhaps up to 8 hours (within a shift).
  2. **Acuity Level 5 Results** – Are Findings that are potentially immediately life threatening, requiring a truly stat or “hyper stat” clinical decision. **requiring direct communication** immediately (“hyper stat”) or more typically within 30 minutes, perhaps as long as 1 hour.
- B. Critical Diagnostic Test – A diagnostic test or procedure that when ordered will result in communication with the ordering practitioner **regardless of the outcome of the result** –normal, abnormal or with critical value/result.

CORE PROCEDURE:

I. Critical Diagnostic Test Results – “Critical Results”

- A. Critical results require direct verbal/telephone communication to the MD, PA, ARNP, RN or other licensed/registered health care provider responsible for the patient’s care so that the patient can be treated promptly.

- B. The time frame for communication of critical test results should be as follows:
1. An **Acuity Level 4** result shall be communicated to an MD, PA, ARNP, RN or other licensed/registered health care provider, within his/her scope of professional practice, within a maximum of 8 hours.
  2. An **Acuity Level 5** result shall be communicated to an MD, PA, ARNP, RN or other licensed/registered health care provider, within his/her scope of professional practice, within a maximum of 1 hour.
- C. The reporting of Critical result and documentation of this communication will be placed on the imaging report in the medical record. The required components to ensure thorough documentation of the process include identification of the MD, PA or ARNP by name, Date and Time.
1. *Communication of critical results to the patients attending physician is exempted from this requirement.*
- D. Diagnostic procedures performed by physicians that demonstrate Critical Result(s) shall be communicated directly by the procedure physician to the ordering physician or physician currently responsible for the patient's care.

II. Critical Diagnostic Tests

- A. Critical Tests, **regardless of the results**, require rapid verbal/telephone communication to the responsible MD, PA, ARNP, RN or other licensed/registered health care provider so that the patient can be promptly treated.

III. Monitoring / auditing of Critical Test results shall be performed and reported on a routine basis as required.

Appendix A

Acuity 5 (Emergent)		Acuity 4 (Urgent)
Cerebral hemorrhage/ hematoma	Pneumoperitoneum (no recent surgeries)	Mediastinal emphysema
Herniation Syndrome	Ischemic bowel (pneumotosis)	Appendicitis
Acute stroke	Active Hemorrhage	Fetal Demise
Intracranial Infection/empyema	Cardiac Tamponade	Intraabdominal abscess
Complex skull fracture	Volvulus/Closed loop obstruction	Active TB
Unstable spine fracture	High Grade Traumatic visceral injury	Acute Cholecystitis
Spinal cord compression, hemorrhage or infarct	Retroperitoneal hemorrhage	Acute Diverticulitis
Airway compromise (e.g., epiglottitis, retropharyngeal abscess)	Bowel Obstruction High Grade/Complete	Acute Osteomyelitis
Acute Arterial Occlusion	Ectopic Pregnancy	DVT
Necrotizing Fasciitis	Placental Abruption	Hemothorax
Tension pneumothorax	Placental Previa ( near term)	Nonaccidental Trauma

Acute Aortic dissection	Testicular or ovarian torsion	Portal Venous gas
Ruptured aneurysm or impending rupture	Uterine Rupture	Pseudoaneurysm
Pulmonary embolism	Significant Line/ Tube Misplacement	SVC Syndrome
	Perfusion abnormality after transplant	Critical carotid stenosis
		Carotid artery dissection
		Retained Surgical Instrument/Sponge

The need for an emergent or urgent call to the MD, PA, ARNP, RN or other licensed/registered health care provider responsible for the patient's care **does not apply to a finding that is considered to be known, expected, or being treated.**

Radiologists are always encouraged to use their good judgment to determine if a result is critical and should be communicated immediately to the referring physician or other registered health care provider. They are not limited in any way by this initial categorization of results that should be communicated in a timely manner. This list is meant to serve as a guideline and is not to be considered all-inclusive or exclusive. In effect, part of the physician's training usually in his or her internship year, is to be able to triage patients and to be able to recognize a situation where immediate action must be taken to save a life or effect a treatment, to recognize a situation where treatment is urgent and should be undertaken within hours, and to recognize a situation where treatment is needed but a short delay will not affect the outcome.

If the Emergency Department Physician/ordering physician have not received a call from the radiologist within 30 minutes and has reasonable suspicion of critical finding, or needs to provide other critical information, they should call ext. 44385 to speak with a radiologist.

ALL ER patient results should be available within one hour or less no matter how urgent the result is considered to be, with the exception of critical test results as defined above.