

**Pathology Requesting for Adult Patients in the Emergency Department - Suggested Tests for Common Conditions**

Presentation	Aseptic collection		Na Citrate		Depending on instrument type and chemistry methodology different hospitals will have a local protocol to follow. The following gel tube colours are a guide only CHECK WITH YOUR LOCAL LABORATORY <span style="color: green;">■</span> <span style="color: red;">■</span> <span style="color: white; border: 1px solid black;">■</span> =white top <span style="color: yellow;">■</span> = Gold top <span style="color: orange;">■</span> =Orange										K EDTA <span style="color: pink;">■</span> or <span style="color: purple;">■</span>	Blood Bank EDTA <span style="color: pink;">■</span>	Syringe BG <span style="color: black;">■</span>	Only send M/C/S if clinical concern UTI	Other Appropriate Investigations
	BC <sup>1</sup>	Coags <sup>2</sup>	UEG <sup>3</sup>	LFT	Ca/Phos/Alb	Urate	Troponin	Lipase	hCG <sup>4</sup> (female)	CRP	CK	Drug level	FBC	Group/Antibody screen <sup>5</sup>	Blood Gas <sup>6</sup>	Dipstick Urinalysis			
Abdominal pain severe (upper/epigastric)	Consider			Plus LDH	Consider		Consider										Consider Lactate		
Abdominal pain severe (lower)	Consider				Consider									Female			Consider Lactate		
Back pain atraumatic (requiring admission)	Consider				Consider		Consider		Consider										
Cellulitis (requiring admission)	Consider			Consider													M/C/S if infected lesions		
Chest pain - suspected Ischaemic Heart Disease				Consider															
Chest pain - suspected Pulmonary Embolism		Consider D-Dimer		Consider			Consider												
Confusion/Syncope	Consider			Consider	Consider		Consider										Consider CSF investigations		
Cerebrovascular Accident		Consider																	
Diabetic Ketoacidosis	Consider																		
Fever for Investigation (include returned travellers)									Consider								Consider malaria, dengue and other illness investigations relevant to Hx		
Fractures Neck Of Femur/Major Long Bone																			
Fractures Minor for Theatre >55yo																			
Gastrointestinal Bleed		Consider																	
Jaundice For Investigation					Consider												Consider relevant viral serology		
Liver Disease					Consider												Consider relevant viral serology		
Oncology patients (febrile neutropenia)					Consider									Consider		Plus M/C/S			
Overdose (significant)										Consider	Consider	Consider		Consider			Consider paracetamol		
Per Vaginal Bleed - 1st trimester								Quantitative									Consider PCR for chlamydia & gonorrhoea		
Pneumonia (requiring admission)																	Recommend sputum M/C/S, respiratory virus PCR and urinary antigen		
Pyelonephritis (not simple cystitis)	Consider																Plus M/C/S		
Renal Colic (1st episode)																			
Renal Disease																			
Seizures (1st episode)			Plus bedside glucose		Plus Mg												Consider CSF investigations relevant to Hx		
Seizures (recurrent)		Consider										Consider	Consider						
Septic Joint - suspected				Consider		Consider				Consider							Joint Fluid M/C/S		
Sepsis																Plus M/C/S	Lactate + other relevant cultures		
Snake Bite <sup>7</sup>				LDH only									Plus film						
Short Of Breath - Asthma (requiring admission)			Consider										Consider		Consider		Nasopharyngeal swab for respiratory virus PCR		
Short Of Breath - suspected Acute Pulmonary Oedema															Consider				
Short of Breath - Chronic Obstructive Pulmonary Disease															Consider		Consider Sputum M/C/S		
Trauma (Major)																			
Warfarin therapy		INR only	Consider if over anti-coagulated	Consider if over anti-coagulated									Consider	Consider					

**Key**

This form is a guide for clinical staff initiating pathology tests. Clinical judgment should be exercised. Some patients may not need any tests or have had them performed recently. If in doubt consult with senior ED doctor. Some tests may not be immediately available locally.

Perform test
Not Generally Indicated
Consider or Ask Supervisor

- BC = Blood Cultures. History of immunocompromise, fever and/or clinical syndrome suggesting sepsis is a more important indicator to collect BC than whether the patient is febrile at the time of examination/collection.
- Coags = Standard Coagulation Panel (includes INR/PT, APTT, fibrinogen).
- UEG = Urea, creatinine, electrolytes and glucose.
- hCG is usually required prior to drug treatment and radiological investigations in women of child bearing age
- There are very specific requirements relating to requests and specimen collection/labelling for transfusion. Please ensure requests and specimens fully comply with local requirements
- Blood gas: Venous blood gas is often acceptable. Arterial sample required for assessment of oxygen status.
- Snake bite: FBC + film, INR +aPTT, UEG, CK, consider fibrinogen + d-Dimer (false negatives occur with point of care devices), consider LDH



From 'Guideline on Pathology Testing in the Emergency Department' developed by the Australasian College for Emergency Medicine (ACEM) and the Royal College of Pathologists of Australasia (RCPA) 2018

Please refer to full guideline document for further information