

# ACUTE KIDNEY INJURY: Risk and Prevention Guidance for Secondary Care

## Patient AKI Risk Factors

- Age > 75 yrs
- Previous AKI
- Heart failure
- Liver disease
- Chronic kidney disease
- Diabetes mellitus
- Vascular disease
- Cognitive impairment

## AKI Risk Events

- Sepsis *e.g. Pneumonia, cellulitis, UTI etc*
- Toxins *e.g. NSAIDs, Gentamicin, Herbal remedies*
- Hypotension *e.g. relative to baseline BP*
- Hypovolaemia *e.g. haemorrhage, vomiting, diarrhoea*
- Major Surgery *planned or emergency*

**In the presence of a risk event and one or more risk factors, activate STOP AKI Prevention Care Bundle (inform patients/carers of risk as appropriate)**

**Sepsis** – if suspected screen and treat promptly– SEPSIS 6

**Toxins** – avoid if at risk of AKI *e.g. Gentamicin, NSAIDs, IV iodinated contrast*

**Optimise BP/volume status** – avoid/correct hypovolaemia, review BP medications

**Prevent harm** – daily U&Es, fluid balance and medication review

### Sepsis

If sepsis suspected - Sepsis 6 as per local policy

- Blood cultures
- Urine output monitoring and U&Es
- Fluids as clinically indicated
- Antibiotics as per local guidelines
- Lactate level
- Oxygen sats monitoring

### Toxins

Avoid, if possible exposure to potential toxins

- Medications *e.g. NSAIDs, gentamicin, amphotericin*
- IV iodinated contrast, discuss with radiology, consider alternative imaging, if required volume expand with IV fluids as per local guideline

### Optimise Blood Pressure

Establish baseline BP  
Review anti-hypertensive medication  
If hypotensive consider withholding

- antihypertensives *e.g. ACE inhibitors, Angiotensin Receptor Blockers*
- diuretics

### Optimise Volume Status

Assess volume status  
Maintain adequate fluid intake

- Consider IV fluids if hypovolaemic
- Resuscitation Fluids  
250-500mls IV crystalloid bolus over 15 mins review response

### Prevent Harm

Daily review of

- U&Es – until no longer at risk
- Fluid balance – input and output and daily weights
- Medications – review doses of drugs metabolised and removed by kidneys *e.g. Penicillins, Digoxin, Metformin, Opiates*