Methods of collection of urine specimens in children

Best technique will vary according to multiple factors including age of child, urgency of specimen, how unwell child is, levels of skill in nursing / medical staff available etc etc

ED may use different techniques than paed ward or OP clinic

Need to be aware of limitations, likely contamination

Suprapubic aspiration

Green needle / syringe directly into bladder. Aseptic technique.

Advantages – low contamination rates, useful in septic neonate

Disadvantages - invasive, need to time between spontaneous voiding

Catheter specimen

Either in and out catheter for specimen only or left in situ if urine output need monitoring.

Advantages – specimen rapidly obtained, lower contamination rates than some techniques

Disadvantages – invasive, appropriate skill and equipment needed

<u>Urine pads</u>

Sterile pad (similar to sanitary towel) placed inside nappy and then aspirated with needle to get urine specimen

Advantages – non invasive, studies suggest lower contamination rates than with bags

Disadvantages – availability, still significant contamination

Clean catch specimen

Clean perineum, nappy off, give parents sterile pot to catch sample

Advantages – relatively low contamination, non-invasive, allows parents to take sample

Disadvantages - messy, time consuming

Urine bags

Clean perineum, stick on bag and wait

Advantages – easy, non-invasive

Disadvantages - high contamination rates. Often used incorrectly