

# Audit 2100 – Effectiveness of Urine Bags for Specimen Collection in the Paediatric Population

## Background and aims

Building on learning from a case at paediatric M&M we have conducted an audit on the use of urine bags to collect samples for urine culture in paediatrics.

National guidance from NICE recommends that **clean catch urine samples should be used whenever possible** in children being investigated for UTI. (NG224 UTI under 16)

## Aim of the Audit

The audit sought to determine:

- How frequently urine bags were being used in the Short Stay Paediatric Assessment Unit
- How often urine cultures were contaminated.
- Whether practice could be improved through staff education and promotion of clean catch sampling.

## Key Findings

The initial cycle showed urine bags were used regularly with a high rate of contamination.

### Method of urine capture

| Date of Audit                  | July 2025  | Feb 2026  |
|--------------------------------|------------|-----------|
| Total patients audited         | 255        | 201       |
| Total urine cultures taken     | 30         | 20        |
| Urine bag used                 | 7 (23%)    | 1 (5%)    |
| Urine bag usage in children <2 | 7/10 (70%) | 1/5 (20%) |

### Contamination levels

Following a teaching intervention the reaudit showed significant reduction in use and contamination rates.

| Date of Audit                         | July 2025  | Feb 2026   |
|---------------------------------------|------------|------------|
| Contaminated samples from urine bags  | 6/7 (86%)  | 1/1 (100%) |
| Contaminated samples from clean catch | 3/23 (13%) | 2/19 (11%) |
| Total contaminated sample             | 9/30 (30%) | 3/20 (15%) |

## Take-home message:

**Learning from our practice can highlight areas where small changes can lead to significant improvement in clinical care and outcomes.**