

# Urine Dipsticks

## Top Tips

### ● **Involve your local hospital laboratory**

...as they can provide advice on a range of issues including the purchase of devices, training, interpretation of results, troubleshooting, quality control, and health and safety.

### ● **Is it necessary?**

Is doing a dipstick test appropriate? Will it change patient management or help decide on further testing?

### ● **Choose the right device**

There is a wide variety of urine dipsticks and automated readers available. Careful selection of equipment that best suit your needs is essential.

### ● **Health and safety**

Be aware of the potential hazards and infection control aspects associated with the handling and disposal of bodily fluids and used test strips outside of a laboratory setting.

### ● **Standard operating procedure (SOP)**

There must be an SOP in place wherever testing is performed, which must include the manufacturer's instructions for use, be easily available to the user and be kept with the equipment. **Always follow the manufacturer's instructions for use.**

### ● **Internal quality control (IQC) / external quality assessment (EQA)**

IQC: The use of control material can provide reassurance that the dipsticks and automated reader are working correctly and assure the operator of the reliability of patient results. EQA: It is advisable that all sites using urine dipsticks undertake the analysis of EQA samples.

### ● **Urine sample collection and storage**

Use a clean, dry preservative free container to collect a fresh urine sample. If unable to analyse sample immediately, check the instructions for use for storage conditions. Do **NOT** use urine dipsticks for any other body fluids.

### ● **Storage and maintenance**

Ensure that you store dipsticks appropriately. Make sure the lid is replaced immediately after use and that the colour chart is kept away from direct sunlight to prevent fading. If an automated reader is used ensure that it is maintained correctly/cleaned and checked.

### ● **Training**

Training must be provided for staff who use dipsticks. Only staff whose training and competence has been established and recorded should carry out tests. If you change the dipsticks remember to update SOPs and retrain staff.

### ● **Interferences / sources of error**

There may be interfering substances in the sample that cause false results e.g. antibiotics, vitamin C, beetroot pigments. Check the instructions for use.

### ● **Record keeping**

...is essential and must include patient results, test strip type and lot number and operator identity.

### ● **Reading results**

When performing manual readings use the correct pot with colour chart for the test strip. Read tests at the correct time in good light. Make sure that you hold the test strip and pot in the right direction. If using automated readers, only use strips that have been validated for use with the reader.

### ● **Results interpretation**

Results should be reviewed by appropriately qualified staff with reference to patients' clinical symptoms and medical history. Be aware that tests may not detect all positive cases eg. a negative result for nitrite does not rule out UTI.