VENEPUNCTURE

INDICATIONS
• Blood sampling in a patient without indwelling arterial line, or when sampling from arterial line inappropriate

EQUIPMENT
• Do not use EMLA cream or alcohol swabs in neonates
• Cleaning solution
  ◦ follow your Trust's infection control team advice on cleansing neonatal skin before venepuncture
• Appropriately labelled blood bottles and request cards
• Non-sterile latex gloves
• 23 gauge (green) butterfly needle
• 2 mL syringe

PROCEDURE
Preparation
• Wash hands and wear gloves
• Identify suitable vein, which should be clearly visible (unlike) in adults, neonatal veins are rarely palpable
  ◦ back of hand or foot
• Avoid sampling from potential IV infusion site or long-line vein (e.g. cubital fossa or long saphenous) whenever possible
• Place paper towels under limb to avoid blood dripping onto bed linen

Insertion and sampling
• Apply hand pressure around limb to distend vein
• Place thumb on skin slightly distal to proposed puncture site
• Hold butterfly needle at a 10-20° angle and puncture skin
• Advance needle towards vein. Resistance may diminish slightly as needle enters vein and blood will be seen in the tubing
• Gently aspirate required volume of blood. This is easier using a small (2 mL) syringe. If large volumes of blood are needed it may be easier to change syringes halfway rather than use a bigger syringe
• When sampling complete, place cotton wool over insertion point and withdraw needle. Maintain pressure on site until bleeding ceases
• Transfer samples to appropriate bottles taking care to mix but not shake blood
• Label all samples and investigation forms at the cot side

DIFFICULT VENEPUNCTURE
• Do not break hub off a green needle: use commercial version, or cut butterfly tubing close to the needle and allow blood to drip into bottle directly from needle
• If small quantities of blood required (<1 mL), use heel prick, but remember that squeezing can cause haemolysis and elevate serum potassium
• Keep track of all needles used and dispose of them in sharps container