

User guide for the preparation of direct slides for Diagnostic Cytology

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1. Labelling Slides

FNA slides must be clearly marked in **PENCIL** on the frosted end (at the top) with the patient's surname, first name and date of birth / hospital number (a minimum requirement of 3 patient identifiers). Remember to add the samples site for example R thyroid especially if there are multiple sites.

SMITH	Frosted end of slide
John F/A dd/mm/yy Site	Where fixed and air-dried slides are sent, PLEASE also label the slides with F (fixed) or A (air-dried).
	The details on the slide MUST correspond to the details given on the request form

2. Direct slide preparation

Place the material on the side of slide with the label on not on the back.



Place 1 small drop of the cell deposit in the centre of a slide about 1cm from the frosted end.

Using a spreader slide make a thin, **evenly** spread film on the slide without using undue pressure, which may result in crush artefact of the cells. Do not spread material near edges or on the label / frosted end. Try to prevent lumps of material as these a difficult to look through.

Air dried slides MUST be thinly spread to allow rapid drying.

It is essential that the slide is fixed or air dried WITHOUT DELAY to preserve cellular integrity of the sample.





This is a stained slide, note the even spread. Note the diagnostic material is not near edges or label, where it would make it difficult to interpret.

Only two slides for air drying and two slides for wet fixation are necessary. Any surplus material should be placed in a labelled white top universal container. The syringe and attached needle are washed out in a white top universal containing 10mls of Cytospin collection fluid and sent to the laboratory with the slides.

Cytospin Collection Fluid can be obtained from the Maidstone Hospital Cytology department using the Diagnostic Cytology supplies order form RWF-CP-CYT-F13 which can be sent or e-mailed to **mtw-tr.lbcsupplies@nhs.net**

3. Fixing the smears

It is essential that the slide is fixed or air dried WITHOUT DELAY to preserve cellular integrity of the sample.

There are two main fixation methods - wet fixation and air-drying.

Wet fixation - Immediately fix the slides using spray fixative. Spray gently to avoid washing material to the edge of the slide.

Air-dried slides - wave the slides gently in the air to aid rapid drying (10 seconds), spreading thinly will aid air drying.

4. Transport to the laboratory

Once fully dry, the FNA slides are placed in plastic slide mailers to minimise the risk of damage. Fixed and air-dried slides should be placed in separate FULLY LABELLED slide mailers.



Slides and specimens should be sent to the laboratory without delay.

Please note, the quality of subsequent staining and ultimately the diagnosis for the patient is very much dependent on the quality of the direct slide preparation and fixation.