

# RENAL ULTRASOUND

## KIDNEYS:

Image Longitudinal LAT, MID, MED or Coronal POST, MID, ANT aspect of both kidneys.

Measure maximum length of each kidney.

Image TRANS SUP, MID, INF pole.

Image and compare renal echogenicity to liver and spleen. The nephrologists expect kidney echogenicity to be reported on all renal failure patients. Note: The focal zone should be at the level that includes both organs.

If hydronephrosis is present, assess and image bladder for obstruction.  
Use color Doppler to evaluate for bilateral ureteral jets.

Document and measure masses/cysts in longitudinal, AP and transverse views.  
Image with color/power and/or spectral Doppler.

## BLADDER:

LONG and TRANS of urinary bladder.

## POST VOID RESIDUAL:

Exam done if requested by referring physician/clinician OR if bladder appears overly distended.

When assessing for PVR, pre void bladder volume should be at a minimum of 100 cc's.  
(Have patient drink more water if below this volume.)

Measure pre & post void bladder by using volume calculation package in machine.

Bladder & Renal Volume:  $L \times W \times H \times .523$