Lung ultrasound should be considered as a daily monitoring tool in all patients in critical care and used in conjunction with and as an adjunct to aid decision making with: Clinical parameters / X-ray / CT imaging

LUS protocol (Identify: diaphragm / pleura) adjust depth, gain and focus

A - Acquire images in 6 regions on the right and left
   All rib spaces in a segment should be examined
   The highest score in each quadrant should be recorded
B – Images in each section are scored 0 – 3
   0 - Normal (Lung sliding and A lines present)
   1 - Well separated B lines
   2 - Coalescent B lines
   3 - Consolidation
C- Scores are documented for each quadrant using the diagram (n/36) and recorded on a daily basis

Other features:

Pneumothorax: No lung sliding / lung point (interface between sliding and non-sliding pleural contour) – CXR indicated

Pleural Effusion: Anechoic or Hypoechoic region between pleural layers. Collapsed lung may be seen floating

Consider looking at changes in score at a certain relevant / accessible region in response to recruitment / PEEP/ proning

If in doubt or clinical concern ask for help from an experienced operator and consider ordering an urgent CXR

Control

Post PEEP increase