

# Lung Protocol Refresher

Where the probe is placed and how many images are needed depends on the clinical question. Pneumothorax is “air” and is seen in anterior views. Pleural effusion and consolidation are “water” and are better seen in posterior and dependent views.

Use the “Lung Protocol” for easy labeling: select the “actions” button on the lower right screen and then “lung protocol” from the “lung actions page.” Click on the zone you will be scanning to label. After each clip is recorded, you will be able to pick a different zone.

In general, hold the transducer in a sagittal orientation between ribs, blue dot pointing toward the head.

Views needed when evaluating for:

## Pleural effusion:

- Bilateral posterior and lateral (6R and 4R, 6L and 4L). Record a CINE of each.
- For large effusions, slide probe toward the head to estimate size

## Pneumothorax/Lung sliding

- Bilateral anterior views (1R and 2R, 1L and 2L). Record a CINE of each.
- Reducing gain (sliding finger toward the screen left) makes it easier to see lung sliding
- If no lung sliding is appreciated, consider moving the probe posteriorly (toward the axilla) to look for a lung point. If a lung point is seen, record that view in a CINE

## Consolidation

- 3 views per side (6R, 4R, and 3R; 6L, 4L, and 3L) to image all lung lobes
- While recording a 6 sec CINE, slide the transducer through multiple rib spaces
- Consider 1R and 1L to better image anterior upper lobes bilaterally (peds, TB, Legionnaires Dz)
- Seeing “focal b-lines” unilaterally in one lobe is suggestive of early bacterial pneumonia
- If consolidation (hepatization) is appreciated, consider changing from the “standard” lung setting to the “tissue” setting by tapping the screen and then tapping on the three circles in the lower left of the screen. This setting is optimized to see lung pathology.