BACKGROUND
- Simplest equipment is suitable
- Gas and fluid are opposite – intermingling is pathologic and creates artifacts
- Standardized thoracic points
- Define the pleural line – all signs arise from there
- Lung ultrasound focuses specifically on artifacts

Standard thoracic imaging points

Pleura and A lines: Normal lung

Pleura: bright horizontal line, moves with normal respiration “Lung sliding”

Rib: creates shadow
A-line: reverberation artifact, horizontal lines below pleura similar in distance as between probe and pleura

B lines: Normal Lung
- Vertical artifact arising from and moving with the pleura
- Long hyperechoic lines extending through image erasing A lines
- 2 or less per field can be seen in normal lung
- > 3 associated with an interstitial process

Pathology

Multiple b lines: moderate pulmonary edema
Coalescing b lines: severe pulmonary edema
Pleural effusion, consolidated lung, bronchograms

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